



**U.S. Department of Health and Human Services
Health Resources and Services Administration**

REPORT TO CONGRESS

**Poison Help Campaign
Fiscal Year 2012**

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I. EXECUTIVE SUMMARY

This fiscal year 2012 (October 1, 2011 – September 30, 2012) Report to Congress on the Poison Help Campaign fulfills the reporting requirements outlined in 42 U.S.C. § 300d-72, as amended by P.L. 110-377, the Poison Center Support, Enhancement, and Awareness Act of 2008 (the Act). This Report to Congress reviews the Poison Help Campaign's initiatives during the specified period.

Poison control centers (PCCs) have been the nation's primary defense against injury and death from poisonings for over 50 years. Today there is a national network of 56 PCCs that provides cost effective quality health care to the general public across the United States, including American Samoa, District of Columbia, the Federated States of Micronesia, Guam, Puerto Rico, and the U.S. Virgin Islands. PCCs play a vital role in the public health system by saving lives and reducing health care costs. Multiple studies have demonstrated that accurate assessment and triage of poison exposures by PCCs save dollars by reducing severity of illness and death and eliminating or reducing the expense of unnecessary trips to emergency departments. Consultation with a PCC can also significantly decrease the patient's length of stay in a hospital and decrease hospital costs.

The Health Resources and Services Administration's Poison Control Program (PCP) plays an important role in ensuring universal access to PCC services. The PCP is legislatively mandated to provide grant funds to PCCs, establish and maintain a single national toll-free number (Poison Help: 1-800-222-1222) to access PCC services, and implement a nationwide media campaign.

The Poison Help Campaign is one initiative in a network of poisoning prevention activities. Its purpose is to increase awareness among the public and health care providers of PCCs, the services they provide, and the Poison Help line. Additional objectives are to raise awareness of the Poison Help English and Spanish language websites, increase media focused on the Poison Help line, and develop partnerships with organizations that reach primary audiences.

II. INTRODUCTION

This fiscal year (FY) 2012 Report to Congress on the Poison Help Campaign addresses the specific mandate outlined in 42 U.S.C. § 300d-72, as amended by P.L., 110-377, the Act, which includes: on an annual basis, prepare and submit to the appropriate committees of Congress, an evaluation of the nationwide media campaign.

Every day, Americans use medicines, chemicals and other products at home and work, most often without adverse effects. However, many of these products can be poisons if they are used in the wrong way, used by the wrong person, or used in the wrong amount. Approximately four million poisoning episodes (actual or suspected exposures) occur in the United States annually, with approximately 438,244 cases leading to hospitalization.¹ In 2009, poisoning was the second leading cause of unintentional injury death—after motor vehicle accidents—accounting for an estimated 31,758 deaths.² Between 1999 and 2010, unintentional poisonings increased by 102 percent, primarily due to prescription opioid pain medications.³

According to the 2006 Institute of Medicine report entitled “Forging a Poison Prevention and Control System,” a conservative estimate of the economic burden of poisoning is \$12.6 billion based on the societal lifetime cost of injury, not including costs related to alcohol deaths.⁴

Poisoning is a public health problem across the entire lifespan. Unintentional exposure to hazardous household substances (including medications found in the home) occurs mainly among children under 6 years. However, unintentional drug overdose and suicide deaths most frequently occur among adolescents, and the elderly are at high risk for poisoning due to scenarios such as mixing medications or taking the wrong dosage.

Poison Control Centers (PCCs) have been the nation’s primary defense against injury and death from poisonings for over 50 years. Today there is a national network of 56 PCCs that provides cost effective quality health care to the general public across the United States including American Samoa, the District of Columbia, the Federated States of Micronesia, Guam, Puerto Rico, and the U.S. Virgin Islands. PCCs play a vital role in the public health system by saving lives and reducing health care costs. Multiple studies have demonstrated that accurate assessment and triage of poison exposures by PCCs decrease costs by reducing severity of illness and death and eliminating or reducing the expense of unnecessary trips to emergency departments. Consultation with a PCC can also significantly decrease the patient’s length of stay in a hospital and decrease hospital costs.⁵

¹ Final Report on the Value of the Poison Center System. 2012. The Lewin Group, Inc.

² Final Report on the Value of the Poison Center System. 2012. The Lewin Group, Inc.

³ Centers for Disease Control and Prevention. Wide-ranging OnLine Data for Epidemiologic Research (WONDER) [online]. (2012). Available from URL: <http://wonder.cdc.gov/mortsql.html>.

⁴ Final Report on the Value of the Poison Center System. 2012. The Lewin Group, Inc.

⁵ Final Report on the Value of the Poison Center System. 2012. The Lewin Group, Inc.

In September 2012, the American Association of Poison Control Centers (AAPCC) commissioned a study to analyze the existing literature on the impact of the PCC system on medical utilization and related factors. The study found that nearly \$753 million was saved each year due to avoided medical service utilization and \$441 million was saved each year due to reduced length of hospital stays. It is estimated that every dollar invested in the PCC system saves \$13.39 in medical costs and lost productivity, for a total savings of more than \$1.8 billion every year. Of that \$1.8 billion, the federal government saves approximately \$662.8 million in medical care savings and reduced productivity.⁶

The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, is the primary federal agency for improving access to health care services for people who are uninsured, isolated, or medically vulnerable. HRSA's Poison Control Program (PCP) plays a vital role in ensuring universal access to PCC services. The PCP has been authorized through Public Law 110-377, the Act of 2008.⁷ The program is legislatively mandated to provide grant funds to PCCs; establish and maintain a single national toll-free number (Poison Help: 1-800-222-1222 to access to PCC services); and implement a nationwide media campaign for the general public and health care providers to increase awareness of PCCs, the services they provide, and the Poison Help line.

The Poison Help Campaign is only one component in a robust poisoning prevention communication landscape that includes:

- the nation's 56 local PCCs;
- national organizations such as the AAPCC, American Academy of Pediatrics, American Cleaning Institute, Consumer Healthcare Products Association, National Community Pharmacists Association, and SAFE KIDS Worldwide; and
- other federal agencies, including, but not limited to, the Centers for Disease Control and Prevention (CDC), Consumer Product Safety Commission (CPSC), Environmental Protection Agency (EPA), Food and Drug Administration (FDA), Housing and Urban Development, and Substance Abuse and Mental Health Services Administration (SAMHSA).

All of these organizations develop and promote poisoning prevention information for the public and health care providers.

The purpose of this report is to describe the Poison Help Campaign, referred to as the Campaign, and its successes during FY 2012. The data provided are process measures specific to HRSA's Poison Help activities and are not representative of poisoning prevention communication efforts as a whole.

⁶ Final Report on the Value of the Poison Center System. 2012. The Lewin Group, Inc.

⁷ Public Law 113-77, the Poison Center Network Act, effective October 1, 2014, reauthorizes the program through fiscal year 2019.

III. POISON CONTROL CENTERS

Health care providers and other specially trained poison experts at local PCCs provide telephone consultation, specifically triage and treatment recommendations, at no cost to the caller 24 hours a day, 7 days a week. A hallmark of PCC case management is the use of follow up calls to monitor case progress and medical outcomes.

PCCs are not only consulted when children are exposed to dangerous household products, but also when seniors and people of all ages take too much medicine or when workers are exposed to harmful substances on the job. Health care providers and emergency medical services personnel regularly consult PCCs for toxicological expert advice, and PCCs are an important partner in emergency preparedness and response as well as in other public health emergencies.

According to the AAPCC, in 2011, more than 3.6 million calls were managed by PCCs, which is an average of nearly 11,000 calls per day. Approximately 2.3 million poisonings were reported in 2011; 93 percent of all poisoning exposures occurred in people's homes; and 1.7 million unnecessary visits to health care facilities were avoided. While less than 1 percent of exposures occurred in health care facilities, approximately 19 percent of calls were made from a health care facility.⁸

In addition to providing the public and health care providers with treatment advice on poisonings, a second critical function of the PCCs is the collection of poison exposure and surveillance data. Multiple federal agencies, including the CDC, CPSC, EPA, FDA, and SAMHSA, use these data for public health surveillance, including timely identification, characterization, or ongoing tracking of outbreaks and other public health threats. Because they are on the front lines, PCCs are well positioned as public health sentinels. Many state health departments collaborate directly with PCCs within their jurisdictions. For example, states and federal agencies used data from PCCs to monitor fungal meningitis, carbon monoxide exposures related to Hurricane Sandy, and laundry detergent poisonings. Additionally, the Office of National Drug Control Policy and the Department of Justice's (DOJ) Drug Enforcement Administration (DEA) have used PCCs' data to monitor the rise in the abuse of synthetic drugs and inform policy development.

PCCs also have a role as educators. Many centers are affiliated with medical toxicology training programs and serve as clinical training sites for residents. Others offer continuing medical education to help health care providers better manage poisoning and overdose cases. For example, a PCC in the mid-Atlantic region takes advantage of its backcountry location by offering an emergency medicine elective course in wilderness medicine and wilderness toxicology in partnership with the local medical school.

PCCs also provide education for the public at large. PCCs' health educators work within their communities, using the networks and mechanisms already in place, to provide locally relevant

⁸ Bronstein AC, Spyker DA, Cantilena LR, Green JL, Rumack BH, Giffin SL. 2011 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): [29th Annual Report](#). 2012. *Clinical Toxicology* (2012) 47, 911–1164.

poisoning prevention information, promote poison safety, and increase awareness of the services their centers provide. The educators have an important role in helping to reduce the incidence of poisoning exposures.

IV. POISON HELP LINE

The Poison Help line is the only national toll-free hotline whose calls are answered by specially-trained medical professionals, 24 hours a day, every day of the year. Callers are connected to the PCC that serves their area. Calls are free and confidential. Multilingual interpreter services in more than 150 languages are available and PCCs are also accessible for the hearing impaired.

V. FY 2012 POISON HELP CAMPAIGN ACTIVITIES

The Campaign seeks to increase awareness of PCCs, the services they provide, and the toll-free Poison Help line among the public and health care providers alike. Additional Campaign objectives are to:

- increase awareness of the Poison Help websites www.PoisonHelp.hrsa.gov and www.PoisonHelpEspanol.hrsa.gov;
- increase the number of traditional and social media impressions focused on the Poison Help line;
- increase the number of traditional and social media impressions focused on HRSA's poisoning prevention resources; and
- develop partnerships with organizations that influence target audiences.

The Campaign is designed to supplement rather than supplant the efforts of local PCCs and other poison-related organizations, such as the AAPCC. HRSA works closely with these organizations not only to identify gaps in communication efforts where it is appropriate, cost effective, and advantageous for the government to take action, but also to develop and employ consistent messaging. Appendix A presents a list of key campaign messages. The PCP engages the PCCs and other organizations to provide feedback on Campaign strategies as well as collateral materials to help ensure that the PCP's efforts are not duplicative and work in tandem with other ongoing activities at the local, regional, and national level. PCC buy-in is critical to the Campaign as the PCCs are the experts on the line and the trusted voice in the community.

In 2011, HRSA commissioned a survey to assess several key elements of the Campaign (see Appendix B for the full report of the 2011 survey results):⁹

- Awareness of the toll-free number;
- Awareness and knowledge of Campaign messaging; and
- Awareness and knowledge of PCCs and the services they provide.

⁹The 40 question computer-assisted telephone survey, combining cell phone and random digit dial methodologies, was a representative sample of 2,000 persons in the United States age 18 or older. Due to budgetary constraints, the PCP only conducts a population-based public awareness survey every 5 years. Prior to 2011, a survey was conducted in 2006.

Among the findings, unaided awareness¹⁰ of the Campaign was moderate at 46 percent. Non-Hispanic Whites were more likely than those of other races and ethnicities to be aware of the Campaign (50 percent unaided awareness). Persons aged 25 to 44 (54 percent), those with household incomes ranging from \$25,001 to \$50,000 (57 percent), and those with children under 18 in the household (54 percent) were also more likely to be aware of PCCs compared to other subgroups. Seventy percent of respondents were aware that calls to a PCC are free, and that services are available for callers who did not speak English. Nearly three in four (74 percent) knew that PCCs operate 24 hours every day.

Respondents were less aware of other Campaign key message points. For example, only 25 percent of people knew that PCC calls are handled by expert medical professionals. Just 24 percent of respondents knew that calls to PCCs are confidential. One-quarter of adults surveyed (26 percent) had the PCC number posted in their home. Eighty-seven percent of respondents indicated they own a cellular or wireless telephone, but only three percent of cell phone owners have the Poison Help number programmed into their cell phones.¹¹

<u>Campaign Key Message</u>	<u>Total Percent</u>
A call to the PCC costs nothing, it is free	70%
PCCs can help non-English speakers	70%
PCCs are open 24 hours	74%
Calls are answered by medical experts	25%
No other organization or individual has access to information provided, confidential	24%

Knowledge gained from the survey has helped to establish benchmarks and inform the Campaign’s activities. As a result, the PCP expanded its outreach efforts to Spanish speakers and older adults, created a new call to action regarding programming the Poison Help line number into cell phones, fine-tuned messaging, and initiated new partnerships. Below is a description of the Campaign’s FY 2012 media outreach, website promotion, and partnership building activities.

Media Outreach

The PCP launched two national radio Public Service Announcement (PSA) campaigns and a print media distribution. Aside from production costs, the airtime and print space for the placements was of no cost to the government. Eight live-read scripts and five recorded PSAs in

¹⁰ Unaided awareness included positive responses to one or more of these three survey items: (1) respondents who voluntarily reported contacting a PCC or the *Poison Help* line in the previous year, (2) respondents who said they would contact a PCC or the *Poison Help* line when presented with any of the survey’s hypothetical poisoning situations, or (3) respondents who correctly identified the number to reach a PCC as 1-800-222-1222. Poison Help Campaign General Population Survey; StrategyOne; March 2012.

¹¹ 3.3 percent of respondents who own a cell phone had the number programmed into their phone. This figure represents 2.9 percent of all survey respondents. Poison Help Campaign General Population Survey; StrategyOne; March 2012.

a variety of lengths, ranging from 10 to 60 seconds, were produced in English and Spanish for the radio distributions. The first PSA release was sent to 500 Spanish-language and 6,500 English radio stations. The PSAs received 37,450 plays on 286 AM and FM stations in 44 states. This amounted to over 528 hours of free airtime, creating more than 192 million listener exposures, and it was worth an estimated \$2.3 million in advertising time. When released a second time, the radio PSAs were broadcasted over 500 times, with a total audience of more than 80 million. Calculated advertising rates for the release would have been nearly \$512,000.

Eight seasonal ready-to-print articles, developed in English and Spanish, were issued to local and regional newspapers through a news release distribution company. The articles generated over 1,500 print placements, with a readership of about 92 million. In addition, the article postings were viewed by over 200 million unique visitors to the distribution company's website in FY 2012. The distribution garnered approximately \$340,000 in free advertising space.

Website Promotion

In FY 2012, HRSA launched a Spanish version of the Poison Help website, www.PoisonHelpEspanol.hrsa.gov, as well as a redesigned version of the English Poison Help website, www.PoisonHelp.hrsa.gov. The Spanish site was the first poisoning-related website to be offered in Spanish and many PCCs that were unable to develop their own Spanish content relied on the PCP, and continue to do so. Both versions of the website were designed to be easy to navigate and to display Poison Help messaging in a dynamic way for an enhanced user-experience. More efficient web-based publishing and editing was achieved by developing the websites in a content management system, which allowed the PCP to provide the most current information to the public and interested stakeholders. Fresh poisoning prevention content and new features, including a dynamic map to locate PCCs and space dedicated to profile individual PCCs, were added. A revised display of available multimedia resources in English and Spanish, including two widgets, four videos, and two radio jingles, improved content sharing across various social media platforms. In addition to multimedia resources, the PCP revised how it promotes educational materials that can be downloaded or ordered directly through the Poison Help website. Nearly 1.3 million Poison Help materials were ordered by and distributed to schools, hospitals/clinics, childcare facilities, faith-based organizations, and government organizations across the country.

Beyond ensuring new website content was useful and information-rich, technical elements were built into the coding of the websites to allow for search engine optimization. Reaching the top of an Internet search page—and staying there—is a process influenced by a range of factors, including keywords used on the website, the number of credible links to the site, and the frequency of original and shareable content. Search engines hold the power to boost or hinder online reputations. Unlike organic search, paid search allows for a customized message with a controlled landing page, making targeted audience content easier to locate. The PCP employed both search engine optimization and paid search, through Google Adwords, to increase website traffic and raise awareness of the Campaign in a cost-effective and measurable way. One month of Google Adwords, for example, resulted in 4,178 additional visitors to the website and 301,300 advertising impressions.

The launch of the new and redesigned websites served as the basis for outreach to internal audiences, partner organizations, and the poison-related online community. The new website content was a useful resource for organizations to share with members and constituents and facilitated partnership building.

Partnership Building

Partnerships enhance the PCPs' ability to meet its goals and expand the reach of its messages. The very relationships between the PCP, the local PCCs, and other national organizations are the foundation that supports program efforts. In FY 2012, the PCP primarily focused on federal partnerships.

Within HRSA, the PCP worked closely with Bureaus and Offices to promote PCCs and the Campaign to their grantees and other constituencies. For example, the PCP worked with the Maternal and Child Health Bureau to improve children's safety through the Maternal, Infant, and Early Childhood Home Visiting and Healthy Child Care America Programs. Poison Help messages have been incorporated in the Text4baby application, the Family-to-Family Health Information Centers, the La Linea Nacional Prenatal Hispana, and the Children's Safety Network National Resource Center. Collaboration with the Office of Rural Health helped connect PCCs with the telehealth network grantees in their areas to share expertise and to improve the quality of health care services. The Bureau of Clinician Recruitment and Service, through the National Health Service Corps Program, promoted PCC services to clinicians through their Corps Connections electronic newsletter, website, and social media platforms. The PCP worked with the Bureau of Primary Health Care to help ensure that the community health centers not only have Poison Help information for their patients, but also rely on PCCs for providing information on emerging hazards and locally relevant information. Outreach to the Migrant Health Centers focused on preventing occupational poisoning exposures. An online PCCs 101 module for pharmacists, developed by the PCP and the Office of Pharmacy Affairs, provided continuing medical education credits through the American Pharmacists Association. The PCP also worked with HRSA's Office of Communications to leverage the Agency's communication vehicles to disseminate poison control messages to the public, grantees, and employees through the HRSA website, broadcast announcements, and HRSA Twitter and Facebook posts.

In addition to internal Agency efforts, the PCP partnered with other federal agencies, such as the CDC, FDA, SAMHSA, DOJ, and the Administration for Community Living (ACL, formerly Administration on Aging) to cross promote programs and leverage existing resources to further expand Poison Help message delivery. For example, HRSA helped publicize the CDC's *Up and Away and Out of Sight* campaign, which aims to keep medications away from children and reduce poisonings. The campaign includes the Poison Help number and encourages people to program the number into their phones. HRSA participated in the DOJ's DEA National Prescription Drug Take-Back Days, which dispose of drugs in environmentally responsible ways and decrease the supply of unused prescription drugs in the home. Poison Help materials were provided to federal partners who wished to include PCCs as a resource for medicine safety questions. HRSA developed and promoted a train-the-trainer program, Taking Your Medicines Safely (TYMS), to raise awareness about medication safety and to help prevent accidental poisonings among older adults with the FDA and the ACL. A downloadable TYMS training

module, made available on the National Council on Aging's (NCOA) website, provided information and materials for interested parties to implement the program.

HRSA also helped to coordinate federal efforts to celebrate the 50th anniversary of National Poisoning Prevention Week (NPPW). Recognized the third week of March, NPPW is dedicated to raising awareness about the dangers of poisoning. The CDC, EPA, and CPSC coordinated messages and used similar, if not identical, Facebook posts and tweets. Additionally, the agencies participated in and cross promoted special events and NPPW efforts. For example, the EPA conducted a NPPW Stakeholder Call featuring senior leadership from the CPSC, CDC, and HRSA; CDC broadcasted two NPPW-related *Morbidity and Mortality Weekly Report* podcasts, which were promoted heavily by HRSA; and CPSC took the lead on the NPPW Presidential Proclamation.

HRSA's own NPPW promotion efforts included the Poison Peril infographic for bloggers, which illustrated the scope of poisoning as a problem and provided simple prevention steps; audience-specific newsletter articles and blurbs; daily social media posts; as well as communication with HRSA staff and grantees. The PCP focused on parent and health bloggers who had previously posted poisoning prevention-related content, including Care2.com (7 million unique visitors a month), TodoBebe.com (74,000 unique visitors a month), OTCSafety.org (22,000 total visitors a month), PediatricsNow.com, Infographipedia.com, and LatinoNews.com. Articles appeared in an array of electronic communication outlets, including the American Pharmacists Association *Pharmacy Today*, the Head Start *Health Services Newsletter*, NCOA *Senior Center's Voice Newsletter* and the American Public Health Association *Focus* and *Focus Xtra*.

VI. CONCLUSION

The Campaign's outreach efforts in FY 2012 magnified the reach of the PCP message, but continued efforts are necessary. HRSA will work to sustain existing strategic communications efforts and expand them where ever possible. The Campaign will continue to coordinate its primary messages with key constituencies, identify opportunities for cross promotion with other federal poisoning prevention activities, and encourage individuals to program the Poison Help line into their phones to ensure that the number is easily accessible. New strategies will be based on cost-effectiveness and maximum reach and evaluated to continually improve results.

VII. ACRONYMS

AAPCC	American Association of Poison Control Centers
CDC	Centers for Disease Control and Prevention
CPSC	Consumer Product Safety Commission
DOJ	Department of Justice
DEA	Drug Enforcement Administration
EPA	Environmental Protection Agency
FDA	Food and Drug Administration
HRSA	Health Resources and Services Administration
NCOA	National Council on Aging
NPPW	National Poison Prevention Week
PCC	Poison Control Center
PCP	Poison Control Program
PSA	Public Service Announcement
PSC	Public Service Announcements
SAMHSA	Substance Abuse and Mental Health Services Administration

VIII. APPENDICES

- A. Poison Help Campaign Key Messages
- B. Poison Help Campaign General Population Survey

Appendix A

Poison Help Campaign Key Messages

- I. The Poison Help line (1-800-222-1222) connects you to your poison center.
 - a. The Poison Help line is fully operational 24 hours a day, 365 days a year.
 - b. Calls to the Poison Help line are free and confidential.
 - c. Translation services are available in Spanish and more than 150 other languages.

- II. The Poison help line is a valuable resource for information to help prevent poisonings and when accidents happen.
 - a. Poison centers provide educational services to prevent poisonings, as well as help during poison exposures.
 - b. The Poison Help line connects you to nurses, pharmacists, doctors, and other poison experts who can provide you with immediate help.
 - c. 70 percent of poison exposures can be managed over the phone, which helps avoid unnecessary trips to the emergency room.
 - d. Calls to poison centers not only save lives, but also time and money.

Appendix B

Poison Help Campaign General Population Survey

Findings from the Poison Help General
Population Survey

March 20, 2012

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1. INTRODUCTION

Each year in the United States, more than 2 million poison exposures are reported to poison centers.¹² In 2002, a national toll-free number, 1-800-222-1222, was created to give people a single access point for general information about poison prevention, and advice and treatment assistance in potential and actual poisoning situations. The *Poison Help* campaign is the vehicle for introducing the national toll-free number for use in poisoning emergencies and providing poison prevention information to all age groups and audience segments. The toll-free number automatically connects callers to the poison center that serves their geographical area. In this way, reaching a local poison center is simplified, thereby reducing confusion about how to quickly access help in potentially dangerous poisoning situations.

The *Poison Help* campaign is a program authorized by the United States Congress, and administered by the Health Resources and Services Administration (HRSA).¹³ The overarching goals for the *Poison Help* campaign are to raise awareness of the national toll-free number and to increase awareness of poison centers and the value of the services they provide. Campaign activities include national and regional media exposure and national and community partnerships.

In 2003, the Health Resources and Services Administration (HRSA) provided the Centers for Disease Control and Prevention (CDC) with funding to contract for the design and implementation of a survey to gauge the *Poison Help* campaign's effectiveness in promoting the national toll-free number, poison center access, and poison prevention. CDC contracted with market research firm Westat to conduct a national survey, which fielded from February to April 2006.

¹² In 2010, 2,384,825 poison exposures were reported to poison centers in the United States. See Bronstein, A.C., Spyker, D.A., Cantilena, L. R., et al. (2011). 2010 Annual Report of the American Association of Poison Control Centers National Poison Data System (NPDS): 28th Annual Report. AAPCC: Washington, DC. Retrieved December 5, 2011 from <http://www.aapcc.org/dnn/Portals/0/2010%20NPDS%20Annual%20Report.pdf>

¹³ The Poison Control Center Enhancement and Awareness Act (Public Law 106-174) was signed into law in 2000. In 2008, the law was amended by Congress via the Poison Center Support, Enhancement, and Awareness Act of 2008 (Public Law 110-377). The legislation reauthorized the poison center national toll-free number, national media campaign, and grant program to provide support for poison centers triage and treatment efforts.

In 2011, HRSA commissioned a second national survey to be conducted by StrategyOne, part of Daniel J. Edelman Companies. The goal of this survey was to assess several key elements of the *Poison Help* campaign:

- Awareness of the toll-free telephone number (1-800-222-1222) to access poison exposure or information services;
- Awareness and knowledge of campaign messaging; and
- Awareness and knowledge of poison centers and the services they provide.

The survey was designed to allow for some indirect comparisons with previous data. (See Appendix B for 2006 questionnaire.) However, because of methodological differences, direct comparisons cannot be made between findings from this survey and previous surveys. The following indirect comparisons can be made between the 2006 and 2011 data:

- How people would respond to five potential poison scenarios¹⁴
- Whether people had previously sought information or help related to a potential poisoning, and if so, why they sought assistance and what organizations and/or individuals they consulted
- Where people who were aware of 1-800-222-1222 learned about it
- What source(s) people turn to when trying to locate a poison center telephone number
- What message points people recall about poison center operations and services, such as who answers calls and hours of operation¹⁵

Comparisons cannot be made regarding overall awareness of poison centers, due to differences in how the variables were measured. In 2006, awareness of poison centers was calculated through the following indirect measures: 1) persons who reported calling a poison center in the previous year, 2) persons who said they would call a poison center in response to one or more of five hypothetical poisoning situations, 3) persons who knew the number 1-800-222-1222 would connect them to a poison center. In the 2011 survey, respondents were asked the same or similar

¹⁴ In 2006, five scenarios were tested. In 2011, these scenarios were repeated, along with five new scenarios that were developed.

¹⁵ Note slight changes in question language from 2006 to 2011

questions to items one and two, but they did not receive questions about where the 1-800 number would connect them, or asked whether they had previously heard of poison centers.

The following report describes the methods, survey findings, and conclusions that can be used in planning the future strategies, tactics and messages of *Poison Help* and other related campaigns.

2. METHOD

Data on awareness of and knowledge about poison centers and poison prevention practices among the general public were gathered through the *Poison Help* General Population Survey, a 10-minute telephone survey that used computer-assisted telephone interviewing (CATI) technology. Households were sampled using a dual frame sample design, which combines cell phone and random digit dial (RDD) sample design methodologies. Respondents age 18 or older were selected for participation in the survey, geographically proportional to 2010 Census data.¹⁶ Forty-one percent of interviews were conducted among cell phone users, and 59 percent were conducted among landline users.

Younger age groups are often more difficult to interview because they are less likely to be home and/or answer the telephone. In order to improve participation among younger respondents, when calling landline telephones interviewers asked to speak to the youngest male 18 years of age or older. If there was no eligible male, interviewers then asked to speak to the youngest female 18 years of age or older. For cell phone sampling, it was assumed that the cell phone is a personal device, so no effort was made to give other household members a chance to be interviewed. Instead, interviewers asked if the person who answers the cell phone is 18 years of age or older to determine if they were eligible to complete the survey. Respondents were offered the option to complete the interview in either English or Spanish; 62 interviews, or 3 percent of all interviews, were conducted in Spanish. Data were gathered from November 15 to December 7, 2011.

¹⁶ States were classified into eight subregions based on the United States Census Bureau divisions:
New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Mid-Atlantic: Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania, West Virginia
Outer South: Kentucky, North Carolina, Oklahoma, Tennessee, Texas, Virginia
Deep South: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, South Carolina
Great Lakes: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin
Farm Belt: Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota
Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
Pacific: Alaska, California, Hawaii, Oregon, Washington

2.1 Questionnaire Design

A major goal of the survey instrument was to capture awareness of the *Poison Help* campaign. To prevent the generation of artificially high estimates of awareness, the order of questions in the survey was carefully crafted to minimize respondent cueing at the outset. Spontaneous awareness of the *Poison Help* campaign was captured by a number of indirect measures. Respondents were counted as having unaided awareness of the *Poison Help* campaign if 1) they indicated that they had contacted a poison center in the past year, or 2) they said unprompted that they would contact a poison center in one or more of the hypothetical poisoning-related situations, or 3) they correctly identified the telephone number to contact a poison control center as 1-800-222-1222. (See Appendix A for the questionnaire.)

Respondents were asked whether they had contacted any person or organization for poison-related information or assistance in the prior 12 months, who they had contacted, and the reason for the call. However, the survey was not intended to measure actual usage of the *Poison Help* line or poison centers themselves. It was anticipated that few respondents would have contacted a person or organization for poison-related information; therefore, ten hypothetical scenarios were developed to assess likely behaviors. Respondents heard four hypothetical scenarios (assigned at random) to minimize respondent burden. In each scenario, respondents were asked the first source they would contact for assistance. The resulting data were used as a measure of awareness of poison centers and their services, as well as the national toll-free number.

The questionnaire also included items to capture awareness of key messages about poison centers, their operations and services, and the national toll-free number, 1-800-222-1222. Respondents were asked whether they had seen, read or heard information about poison centers and the national toll-free number, how they would find a number to call for poison information, whether they had the number posted in their home, and for those who indicated they own a cell phone, whether they had the number programmed into their cell phone.

In addition to questions addressing the substantive topics, respondents were asked about several individual and household demographic characteristics that were of interest for the analysis including age, education, income, and presence of children.

2.2 Data Characteristics

Analyses for this report were based on weighted data from 2,000 completed *Poison Help* General Population Survey interviews. In most analyses missing cases (responses such as “don’t know” or refusals to respond) were eliminated. In some instances, “don’t know” responses were judged to be meaningful and were included in analysis.

Completion rates were calculated based on eligibility and completion for the following steps of the survey process: 1) confirmation of residential status of the number dialed, 2) determination of presence or absence of an adult at least 18 years old in the household, and 3) completion of the interview with the selected adult. Of all telephone numbers, 10.1 percent were found to be eligible households. The completion rate among eligible households was 85.2 percent.

Because inferences to the U.S. population of persons aged 18 and older were to be made, weighting procedures were used to adjust the *Poison Help* General Population Survey cases for undercoverage and nonresponse and to reflect characteristics of the national population. The first step was the creation of both household-level and extended-level person weights.¹⁷

The final step in the weighting process was raking, a specific type of poststratification adjustment applied to the extended-level person weights used to reduce possible bias in the survey. Through raking, initial person weights are adjusted within specific classes or dimensions. Three dimensions were used in the raking procedure for the *Poison Help* General Population Survey, based on 2010 Census data. The first dimension was a cross-classification of age (18-24 years, 25-44 years, 45-64 years, and 65 years and older) with sex. The second dimension was a cross-classification of race/ethnicity (white non-Hispanic, African American non-Hispanic, Hispanic, and non-Hispanic other) with educational attainment (less than 12th grade, high school diploma but not college graduate and bachelor’s degree or higher). The final

¹⁷ Household-level weight was computed as the ratio of the total number of telephone numbers in the sampling frame to the number of telephone numbers sampled. Extended-level person weight was computed as the product of the household weight and the reciprocal of the probability of selecting the adult within the household. The probability of selecting the adult was $1/N$, where N is the number of adults in the household as determined in the screener. If necessary, the person weight was adjusted to reflect multiple telephone lines in the household, and therefore, multiple chances to be included in the sample.

dimension was type of household (household with a child, adult-only household). Weights are applied through an iterative process until all dimensions are in line with 2010 Census data.¹⁸

There are limitations to these data. The margin of error for the overall sample of 2000 interviews is plus or minus 2.2 percent at the 95 percent confidence level. The margin of error for individual responses varies depending on the number of respondents asked. Several analyses were based on small subpopulations (e.g., persons who knew the national toll-free *Poison Help* telephone number), resulting in some cells with a very small number of cases. Percentages based on cells containing fewer than 30 cases are indicated in the tables by italicized print; readers should view findings related to these estimates with caution. Significance testing at the 95 percent confidence interval or better was conducted using a formula comparing estimates and unweighted sample sizes. Unweighted estimates from the *Poison Help* General Population Survey generally differed by less than two percentage points from weighted estimates. Significance was tested only for estimates that differed by 5 percentage points or more, which was established as a meaningful difference between subgroups.

3. FINDINGS

This section presents results from the *Poison Help* General Population Survey conducted among adults across the United States. Findings from this survey help illuminate general public awareness and knowledge of several key elements of the *Poison Help* campaign:

- Toll-free telephone number (1-800-222-1222) to access poison exposure or information services;
- *Poison Help* campaign messaging; and
- Poison centers and the services they provide.

This section also describes respondents' previous experience in obtaining poison information or assistance, and where they would be likely to seek information in hypothetical poison situations. Finally, findings are reported on the various resources individuals might access for poison

¹⁸ In raking, weights are poststratified to one dimension (e.g., age by gender), and then the adjusted weights are poststratified to another dimension (e.g., type of household). The iterative procedure is repeated until the control totals for all dimensions are within an acceptable range of Census data.

assistance or information, how they learned about these resources, and where they would look to find a telephone number for poison assistance.

3.1 Population Characteristics

Survey respondents were representative of persons in the United States age 18 or older. Table 1 presents selected individual and household characteristics of the survey population.

Respondents were asked whether they were of Hispanic origin (ethnicity) and then asked to select one or more racial categories to describe themselves. Therefore, the category Hispanic includes respondents from any race. The categories white, African American, and other races include only non-Hispanic persons. Other races include Asian, American Indian, Alaska native, Native Hawaiian, Pacific Islander, and multiracial. The majority of respondents were non-Hispanic white (68 percent), 14 percent were of Hispanic origin, 12 percent were non-Hispanic African American, and 6 percent were non-Hispanic from other racial groups. Three percent of respondents declined to or could not provide information on their race or ethnicity.

Table 1.—Characteristics of *Poison Help* General Population Survey respondents and their households: 2011

Respondent characteristic	Number of cases	Projected population	Percent
Total	2,000	235,564,071	100%
Race/Ethnicity			
White, non-Hispanic.....	1,363	159,825,993	68
African American, non-Hispanic.....	233	27,346,556	12
Hispanic ¹	280	32,838,965	14
All other races, non-Hispanic.....	127	14,844,428	6
Sex			
Female.....	1,016	119,158,544	51
Male.....	984	115,405,520	49
Age			
18-24.....	262	30,680,980	13
25-44.....	688	80,736,948	34
45-64.....	689	80,783,863	34
65 or older.....	341	40,016,632	17
Level of education			
High school or less.....	895	104,967,415	45
Some college.....	387	45,388,147	19
College graduate or higher.....	637	74,708,659	32
Household income²			
Less than \$25,000.....	365	42,831,399	18
\$25,001 to \$50,000.....	382	44,848,650	19
\$50,001 to \$75,000.....	286	33,589,575	14
Over \$75,000.....	506	59,344,709	25
Household characteristics			
Children under age 18.....	763	89,485,317	38
Children age 5 or younger.....	355	41,594,645	18
Households without children.....	1,215	142,447,878	61
Region³			
New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).....	96	11,307,075	5
Mid-Atlantic (Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania, West Virginia).....	331	38,985,854	17
Outer South (Kentucky, North Carolina, Oklahoma, Tennessee, Texas, Virginia).....	364	42,872,661	18
Deep South (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, South Carolina).....	316	37,219,123	16
Great Lakes (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).....	334	39,339,200	17
Farm Belt (Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota).....	95	11,189,293	5
Mountain (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming).....	140	16,489,485	7
Pacific (Alaska, California, Hawaii, Oregon, Washington).....	321	37,808,033	16
Insurance status			
Employer/Union.....	1,028	121,079,932	51
Self-Purchased.....	411	48,408,417	21
Medicare.....	461	54,297,518	23
Medicaid.....	323	38,043,597	16
Health Savings Account.....	141	16,607,267	7
No Insurance.....	167	19,669,600	8

¹The category Hispanic includes any race. The categories white, African American, and other include only non-Hispanic persons. Other races include Asian, American Indian, Alaska Native, Native Hawaiian, Pacific Islander, and multiracial.

²Twenty-three percent of respondents did not answer this question.

³Based on U.S. Census Bureau regional classifications.

Other individual demographic information gathered included sex, age, and level of education. About half of respondents were female (51 percent). Fifty-one percent were 45 years old or older, while 34 percent were between the ages of 25 and 44 and 13 percent were between the ages of 18 and 24. Thirty-two percent of respondents had a college degree or higher education, followed by those with some college education (19 percent) or a high school education or less (45 percent).

Respondents were also asked about their household income and whether persons of certain age groups live in the household. Thirty-seven percent reported an annual total income of \$50,000 or less, and 39 percent said their annual income was higher than \$50,000. The remaining 23 percent of respondents did not provide information on household income. Thirty-eight percent of households included at least one child under the age of 18, and 18 percent of households included at least one child age 5 or younger.

3.2 Awareness of *Poison Help* Campaign

Awareness of the *Poison Help* campaign was calculated using responses from three survey items. Persons who spontaneously reported contacting a poison center or the *Poison Help* line in the previous year (R4 from the *Poison Help* General Population Survey questionnaire in Appendix A) or said that they would contact a poison center or the *Poison Help* line in response to any of the hypothetical poisoning situations (R1a-j) were counted as having unaided awareness. Respondents also qualified as having unaided awareness if they correctly identified the number to reach a poison center as 1-800-222-1222 (R7). Total unaided awareness included positive responses to one or more of these three survey items.

Unaided awareness of the *Poison Help* campaign was moderate at 46 percent (Table 2). Non-Hispanic whites were more likely than those of other races and ethnicities to be aware of the campaign (50 percent unaided awareness). Persons aged 25 to 44 (54 percent), those with household incomes ranging from \$25,001 to \$50,000 (57 percent), and those with children under 18 in the household (54 percent) were also more likely to be aware of poison centers compared to other subgroups.

Table 2.—Awareness of *Poison Help* campaign among the general public, by selected characteristics: 2011

Respondent Characteristics	Contacted a poison center or the <i>Poison Help</i> line in the last year (volunteered)	Would contact poison center in a hypothetical scenario ¹	Correctly identified 1-800 number	Total Awareness
Total percent	2%	44%	4%	46%
Total number of cases	40	882	70	919
Race/Ethnicity				
A. White, non-Hispanic	3	48 ^{BCD}	4	50 ^{BCD}
B. African American, non-Hispanic	1	36	3	39
C. Hispanic	3	38	1	40
D. All other races	2	36	3	38
Sex				
E. Female	2	46	4	48
F. Male	2	42	3	44
Age				
G. 18-24	1	44 ^J	2	44 ^J
H. 25-44	6	51 ^J	5	54 ^{GU}
I. 45-64	1	46 ^J	4	47 ^J
J. 65 or older	1	28	1	29
Level of education				
K. High school or less	2	43	3	45
L. Some college	3	47	4	48
M. College graduate or higher	3	46	4	49
Household income				
N. Less than \$25,000	2	41	3	43
O. \$25,001 to \$50,000	2	56 ^{NPQ}	3	57 ^{NP}
P. \$50,001 to \$75,000	2	43	6	45
Q. Over \$75,000	4	47	3	49
Household status				
R. Children under age 18	5	51 ^T	6	54 ^T
S. Children age 5 or younger	9	52 ^T	8	57 ^T
T. Households without children	1	40	2	41
Region				
U. New England	3	50	3	52
V. Mid-Atlantic	2	41	3	43
W. Outer South	1	47	5	50
X. Deep South	1	40	3	41
Y. Great Lakes	3	47	3	50
Z. Farm Belt	2	44	8	45
AA. Mountain	3	48	3	51
BB. Pacific	2	40	2	42
Insurance status				
CC. Employer/Union	2	47	4	49 ^{EE}
DD. Self-Purchased	2	42	2	43
EE. Medicare	2	34	2	36
FF. Medicaid	4	39	4	41
GG. Health Savings Account	4	44	5	47
HH. No Insurance	0	45	5	48 ^{EE}

¹Each respondent received four of the ten hypothetical scenarios, assigned at random.

NOTE: Significance at $p < .05$ is indicated by $a > b > c$, etc. Only differences of 5% or more are noted. Percents based on fewer than 30 cases are italicized.

In this example, in the Total Awareness column, respondents under the age of 65 (variables G, H and I) have higher awareness of *Poison Help* than respondents 65 and older (variable J), the difference is 5% or greater, and the difference is statistically significant. Respondents aged 25-44 years have higher awareness than respondents aged 18-24 years and respondents aged 45-64 years, the difference is 5% or greater, and the difference is statistically significant. The differences between other age groups, such as comparing respondents aged 18-24 years and respondents aged 45-64 years, is either less than 5%, or it is not statistically significant.

3.3 Knowledge of *Poison Help* Campaign Messages

While unaided awareness of the *Poison Help* campaign was moderate, members of the public are knowledgeable about many of the campaign messages about poison center services and operations. Seven message points were tested regarding hours of operation, call staffing, national or local scope, and other campaign points.

People were most knowledgeable about who uses poison control services and hours of operation (Tables 3A and 3B). Seventy-eight percent believed that poison control services are used by everyone, compared to perceptions that it is only intended for specific organizations or individuals. Nearly three in four (74 percent) knew that poison centers operate 24 hours every day, while 24 percent did not know when poison centers are open to handle calls. Respondents were also aware that calls to a poison control center are free (70 percent) and that services are available to callers who do not speak English (70 percent).

Compared to other population groups, Hispanics, persons 65 and older, persons with a high school diploma or less, and persons with annual household incomes of \$25,000 or less expressed lower knowledge levels about poison center services and operations. These groups were less likely than their counterparts to know that poison center services can be used by everyone and were less likely to identify the correct hours of operation.

A majority of respondents (55 percent) did not know whether there is a single national poison center or multiple poison centers that serve local areas (Table 3C). More than one-third (37 percent) were aware there are multiple poison centers, while 8 percent believed there is a single national center.

Only 25 percent of people knew that poison center calls are handled by expert medical professionals, another 21 percent believed trained volunteers answer poison center telephone calls, and 55 percent did not know who answered poison center calls.¹⁹ African Americans, Hispanics, persons with a high school diploma or less, and persons with household incomes of \$50,000 or less were more likely to know calls are answered by medical experts.

¹⁹ Note: percentages exceed 100 percent due to rounding.

Table 3A.—Knowledge of *Poison Help* campaign messages among the general public, by selected characteristics: 2011

Respondent Characteristic	Poison control services are used by ¹ ...				
	Anyone/ everyone	Child caregivers	Health care providers	Law enforcement/ firefighters	Don't know
Total percent	78%	85%	79%	79%	8%
Total number of cases	1560	1697	1577	1575	133
Race/Ethnicity					
A. White, non-Hispanic	81 ^C	88 ^C	80	82 ^C	6
B. African American, non-Hispanic	73	82	82	81 ^C	5
C. Hispanic	71	77	77	69	10
D. All other races	79	83	81	74	8
Sex					
E. Female	79	86	79	77	9
F. Male	77	83	78	80	6
Age					
G. 18-24	83 ^J	86 ^J	82 ^J	83 ^J	5
H. 25-44	80 ^J	88 ^J	82 ^J	78	5
I. 45-64	81 ^J	86 ^J	80 ^J	81 ^J	7
J. 65 or older	65	74	70	72	15 ^{GH}
Level of education					
K. High school or less	75	81	78	76	9 ^{LM}
L. Some college	84 ^K	89 ^K	80	85 ^K	4
M. College graduate or higher	83 ^K	90 ^K	84 ^K	84 ^K	4
Household income					
N. Less than \$25,000	68	78	70	68	13 ^{OPQ}
O. \$25,001 to \$50,000	83 ^N	88 ^N	85 ^N	85 ^N	5
P. \$50,001 to \$75,000	81 ^N	89 ^N	82 ^N	83 ^N	3
Q. Over \$75,000	85 ^N	90 ^N	84 ^N	87 ^N	3
Household status					
R. Children under age 18	79	88	79	78	6
S. Children age 5 or younger	81	86	78	77	6
T. Households without children	78	84	80	80	8
Region					
U. New England	79	79	70	72	11
V. Mid-Atlantic	79	84	82 ^{BB}	79	6
W. Outer South	80 ^{BB}	87 ^{BB}	86 ^{UXYBB}	85 ^{XBB}	4
X. Deep South	79	85	79 ^{BB}	75	9 ^W
Y. Great Lakes	77	87	79 ^{BB}	83 ^{BB}	8
Z. Farm Belt	79	86 ^{BB}	78	77	4
AA. Mountain	85 ^{BB}	92 ^{VXBB}	84 ^{BB}	87 ^{BB}	7
BB. Pacific	71	78	68	70	13 ^{VXZ}
Insurance status					
CC. Employer/Union	83 ^{DDEEFFHH}	90 ^{DDEEFFHH}	80	85 ^{EEFFHH}	4
DD. Self-Purchased	76	84	76	81 ^{HH}	8 ^{CC}
EE. Medicare	71	82	81	76	9 ^{CC}
FF. Medicaid	73	84	81	74	8
GG. Health Savings Account	82	86	77	79	7
HH. No Insurance	74	76	75	71	9

¹ Respondents could choose more than one in answer; totals may exceed 100%. Respondents volunteered a total of 87 other responses in addition to the categories provided; data is not reported in the table.

NOTE: Significance at p < .05 is indicated by a > b > c, etc. Only differences of 5% or more are noted. Percents based on fewer than 30 cases are italicized.

Table 3B.—Knowledge of *Poison Help* campaign messages among the general public, by selected characteristics: 2011—continued

Respondent Characteristics	Poison control centers are open ¹ ...		A call to the poison center costs ² ...		Poison centers can help non-English speakers ³ ...	
	24 hours	Don't know	Nothing, it is free	Don't know	Yes	Don't know
Total percent	74%	24%	70%	29%	70%	27%
Total number of cases	1487	484	1410	570	1394	536
Race/Ethnicity						
A. White, non-Hispanic	77 ^{BC}	22	75 ^{BCD}	24	67	28 ^C
B. African American, non-Hispanic	69	29	63	36	65	23
C. Hispanic	69	27	61	37	76	19
D. All other races	71	22	63	36	67	24
Sex						
E. Female	73	26	73 ^F	26	72	25
F. Male	76	23	68	31	68	28
Age						
G. 18-24	75 ^J	20	66 ^J	29	74 ^J	21
H. 25-44	79 ^J	21	79 ^{GJ}	20	73 ^J	24
I. 45-64	78 ^J	22	74 ^J	25	70 ^J	27
J. 65 or older	59	39 ^{GHI}	50	50 ^{GHI}	59	37 ^{GHIJ}
Level of education						
K. High school or less	71	27 ^{LM}	63 ^{LM}	35 ^{LM}	69	26
L. Some college	79 ^K	20	78	22	75 ^M	23
M. College graduate or higher	78 ^K	21	78	21	69	28
Household income						
N. Less than \$25,000	69	27 ^{OQ}	65	33 ^{PQ}	69	24
O. \$25,001 to \$50,000	84 ^N	15	73 ^N	27	78 ^N	19
P. \$50,001 to \$75,000	79 ^N	21	77 ^N	22	72	25
Q. Over \$75,000	80 ^N	18	76 ^N	23	67 ^N	31 ^O
Household status						
R. Children under age 18	77	21	79	20	70	26
S. Children age 5 or younger	77	20	82	16	69	26
T. Households without children	73	26 ^R	65	34 ^{RS}	70	27
Region						
U. New England	67	31	72	28	66	27
V. Mid-Atlantic	72	26	69	31 ^{AA}	63	28 ^W
W. Outer South	79 ^{XBB}	19	75 ^{XBB}	24	76	31
X. Deep South	68	30 ^{WYAA}	64	33	70	22
Y. Great Lakes	79 ^{XBB}	20	73 ^X	27 ^{WAA}	68	25 ^W
Z. Farm Belt	79 ^X	21	74	23	67	30
AA. Mountain	81 ^{XBB}	18	80	20	73	24
BB. Pacific	70	29 ^{WYAA}	65	33	73	26
Insurance status						
CC. Employer/Union	79 ^{EE}	21	75 ^{DDEE}	24	70	27
DD. Self-Purchased	76 ^{EE}	23	67 ^{EE}	33 ^{CC}	65	32
EE. Medicare	66	31 ^{CCDDGG}	57	42 ^{CCDDGG}	67	29
FF. Medicaid	73	24	68 ^{EE}	30	66	28
GG. Health Savings Account	78 ^{EE}	22	72 ^{EE}	24	71	25
HH. No Insurance	71	27	66	37	67	28

¹1% of respondents chose the category "Monday-Friday, 9am-5pm," and less than 1% of respondents chose the category "Weekends only." Data not reported in table.

²1% of respondents chose the category "A maximum of \$25." Data not reported in the table. ³3% of respondents responded "No" to this question. Data not reported in table.

NOTE: Significance at p < .05 is indicated by a > b > c, etc. Only differences of 5% or more are noted. Percents based on fewer than 30 cases are italicized.

Table 3C.—Knowledge of *Poison Help* campaign messages among the general public, by selected characteristics: 2011— continued

Respondent Characteristics	Is there...			Calls are answered by...			Others organizations and individuals that have access to information provided...					
	Multiple local centers	Single national location	Don't know	Medical experts	Trained volunteers	Don't know	No one/confidential	Law enforcement	Health care provider	Social Services	Insurance company	Don't know
Total percent	37%	8%	55%	25%	21%	55%	24%	19%	17%	11%	9%	49%
Total number of cases	749	153	1097	491	414	1095	427	337	346	224	177	986
Race/Ethnicity												
A. White, non-Hispanic	39	9	52	22	21	57 ^{BC}	25	18	16	10	8	49
B. African American, non-Hispanic ...	42	5	52	30 ^A	25	45	22	23	19	16	8	49
C. Hispanic	32	6	62 ^A	33 ^A	22	45	19	20	23	16	12	48
D. All other races	32	7	62	25	16	59 ^{BC}	20	27	30	14	15	40
Sex												
E. Female.....	36	9	55	25	20	55	24	17	17	11	8	50
F. Male.....	39	7	55	28	22	50	23	21	18	12	10	48
Age												
G. 18-24.....	44 ^J	4	52	28	22	50	24 ^J	25 ^H	29 ^{HH}	14	15	43
H. 25-44.....	40 ^J	6	54	25	22	53	28 ^J	18	16	12	9	45
I. 45-64.....	36	10 ^{GH}	54	24	20	56	24 ^J	17	14	11	7	51
J. 65 or older	30	9 ^G	61	22	18	60 ^G	14	20	16	10	9	58 ^{GH}
Level of education												
K. High school or less	35	5	60 ^{LM}	30 ^{LM}	16	54	18	22 ^M	20 ^M	12	10	50
L. Some college	42 ^K	11 ^K	47	21	23 ^K	56	26 ^K	19	19	12	11 ^M	48
M. College graduate or higher.....	41 ^K	10 ^K	49	17	27 ^K	56	32 ^{KL}	15	14	9	6	46
Household income												
N. Less than \$25,000.....	33	7	60 ^{OQ}	32 ^{PQ}	20	48	18	19	20 ^Q	15 ^Q	11 ^Q	50
O. \$25,001 to \$50,000.....	43 ^N	7	50	29 ^{PQ}	25	46	27 ^N	20	22 ^Q	13	8	42
P. \$50,001 to \$75,000.....	37	10	53	15	23	62 ^{NO}	23	20	17	10	11 ^Q	51 ^O
Q. Over \$75,000.....	44 ^N	10	46	21	22	57 ^{NO}	29 ^N	17	13	10	6	49
Household status												
R. Children under age 18.....	40	8	53	26	20	54	26	18	18	12	9	47
S. Children age 5 or younger	38	8	54	28	24	48	25	22	23	16	11	43
T. Households without children	36	8	56	24	21	55	22	19	17	11	9	51
Region												
U. New England.....	25	7	68 ^{WAA}	34	13	55	30	12	6	4	2	56
V. Mid-Atlantic.....	37	7	56 ^{AA}	22	23	53	23	18	19 ^U	11	10 ^{UZ}	49
W. Outer South.....	41 ^U	11 ^X	49	27	24 ^Y	55	28 ^X	23 ^{UZBB}	20 ^U	11 ^U	9 ^{UZ}	42
X. Deep South.....	37	5	58 ^{WAA}	28	21	49	20	17	17 ^U	13 ^{UZBB}	10 ^{UZ}	53 ^N
Y. Great Lakes.....	39 ^U	8	53	21	17	51 ^{WX}	21	20	18 ^U	16 ^{UZBB}	12 ^{UZ}	52 ^N
Z. Farm Belt	38	8	54	24	16	62	30	13	10	6	2	53
AA. Mountain.....	48 ^{UBB}	8	43	26	26	26	20	28 ^{UXZBB}	25 ^{UZ}	14 ^U	10 ^{UZ}	41
BB. Pacific	33	6	61 ^{WAA}	19	19	19	23	14	15 ^U	7	7 ^Z	52 ^N
Insurance status												
CC. Employer/Union.....	41 ^{EE}	8 ^{FF}	51	21	22	57 ^{FF}	27 ^{DDEEFF}	17	15	10	8	49
DD. Self-Purchased.....	38	9	53	23	22	56 ^{FF}	17	25 ^{CC}	24 ^{CCHH}	14	15 ^{CCHH}	50
EE. Medicare	31	9	60 ^{CCGG}	26	20	55 ^{FF}	19	22 ^{CC}	21 ^{CC}	16 ^{CCHH}	10	47
FF. Medicaid	35	4	61 ^{CCGG}	39 ^{CCDDEEGG}	19	42	18	23	23 ^{CC}	15	10	49
GG. Health Savings Account	43 ^{EE}	11 ^{FF}	46	26	25	49	32 ^{DD}	22	21	16	13	41
HH. No Insurance	34	5	61 ^{GG}	32 ^{CC}	17	52	26	18	14	8	6	50

NOTE: Significance at p < .05 is indicated by a > b > c, etc. Only differences of 5% or more are noted. Percents based on fewer than 30 cases are italicized.

Just 24 percent of people knew that calls to poison centers are confidential, while 27 percent believed other organizations or individuals, such as law enforcement (19 percent), health care provider (17 percent), social services (11 percent), and/or the insurance company (9 percent), had access to the information. Nearly half (49 percent) did not know who had access to information provided by a caller.

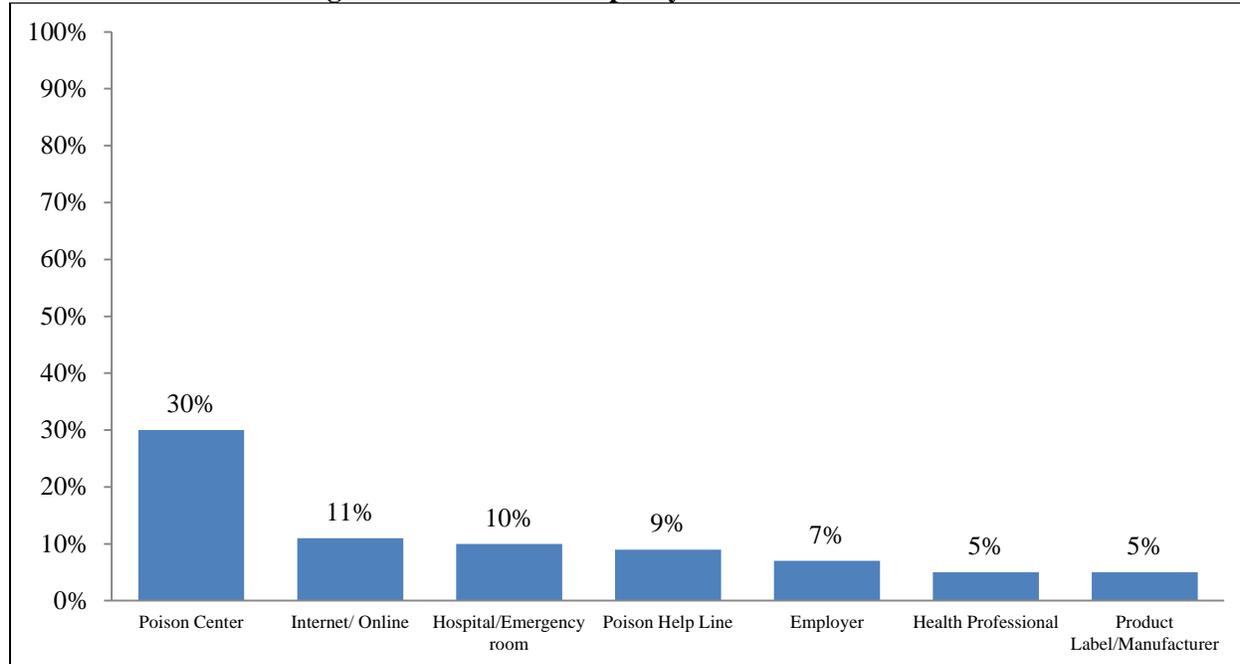
3.4 Previous Poison Telephone Assistance and Future Call Intentions

3.4.1 Previous Poison Assistance Call History

Few persons (6 percent) had contacted any individual or organization for poison assistance or information in the 12 months prior to this survey (data not shown in Figure 1). Respondents who sought information or help were most likely to volunteer that they had contacted a poison center (30 percent of those who sought information, or 1.9 percent of all respondents, Figure 1). An additional 9 percent indicated they had called the nationwide toll-free number. Other resources included the Internet (11 percent), hospital or emergency room (10 percent), employer (7 percent), health care professional (5 percent), product labels and/or manufacturers (5 percent), 911 (4 percent), and media (4 percent). Nineteen percent volunteered another category.²⁰

²⁰ Responses are classified as “Other” if 4 or fewer respondents volunteered the answer choice.

Figure 1.—Top organizations or persons contacted for poison information or assistance, among those who sought information in the past year¹: 2011



¹Six percent of the population said they had called for poison information or assistance in the previous year. Participants could provide multiple responses.

Among those who sought information or help, 23 percent said they were looking for general awareness. Eighteen percent called about something a child swallowed, 18 percent said it involved medications, 9 percent called about something related to a pet or animal, and 9 percent indicated they work in the health industry.

3.4.2 Future Call Intentions

In addition to learning about participants' previous calls for poison information or assistance, data were gathered about where they would be likely to seek information first in a series of hypothetical poison-related situations. Each respondent received four of the following ten scenarios at random:

- A young child swallowed several adult vitamin pills.
- An older person visiting your household says that he may have taken his high blood pressure medication twice by mistake.
- A neighbor runs in and says she needs help because her child drank windshield wiper fluid.
- You think you have an insect bite and your arm becomes very swollen from wrist to elbow.
- You are looking for general information about ways to prevent poisoning.
- You hear on the news that there has been a recall of eggs in your state.
- The alarm on your carbon monoxide detector goes off in the middle of the night.
- You were using pesticides in your garden and now you are feeling ill.
- You hear on the radio that the water supply in your city has been contaminated and you are worried about whether it is safe to drink and use.
- Your spouse was helping you with cleaning the house, but is now having difficulty breathing.

Forty-four percent of people said they would contact a poison center first in at least one scenario (Table 2, column C). People aged 25 to 44 were most likely to identify the poison center as their first resource, followed by people aged 45-64; people aged 65 and older were least likely to name poison centers as their first source of information or help. Non-Hispanic whites, people with household incomes of \$25,001 to \$50,000, and those with children under age 18 in the household were more likely to name poison centers as their first resource compared to their counterparts.

People were more likely to say they would call a poison center first if they were seeking general information compared to other hypothetical situations. Forty-three percent would call for poison general prevention information, while 32 percent would call a poison center first if they were concerned about a child who drank windshield wiper fluid, 29 percent would call if a child who swallowed adult vitamins,

29 percent would call when feeling ill after using garden pesticides, and 7 percent would call for an older person who may have taken his or her medication twice (Table 4). In four of these five hypothetical scenarios, people under the age of 65 were significantly more likely to say they would contact a poison center than people aged 65 or older (Table 5). The lone exception is when looking for general poison prevention information: there was not a statistically significant difference in responses to this question based on respondent age.

In the other scenarios, no more than 5 percent of respondents named poison centers as their first point of contact. People were most likely to call 911 if a child had swallowed windshield washer fluid (52 percent) or an adult was having difficulty breathing (59 percent). Thirty-two percent of people would contact a poison center if a child had swallowed windshield washer fluid. People with children in the household were significantly more likely to contact a poison center in this scenario (40 percent with children under 18 and 44 percent with children 5 and younger would contact a poison center) than those without children (27 percent).

People would call a health professional first if an older adult may have mistakenly taken medication twice (37 percent) or their arm was swollen from an insect bite (41 percent). Respondents would turn to other sources in cases of food recalls, carbon monoxide alarms, and water contamination.

Table 4A.—First organization or person to call for poison assistance or information identified by the general public in ten hypothetical situations: 2011

Where would you go for information or help first?	Looking for general information to prevent poisoning	Neighbor's child drank windshield wiper fluid	Young child swallowed several adult vitamins	Feeling ill after using pesticide in the garden	Older person thinks he took high blood pressure medication twice
Number of respondents assigned to scenario.....	800	816	836	803	803
Poison center/Poison Help line:					
Total percent	43%	32%	29%	29%	7%
Total number of cases	342	262	244	232	54
911	5	52	29	14	27
Health Professional	5	3	18	27	37
Hospital/Emergency room.....	5	6	14	12	13
Internet/Online	19	0	0	1	1
Other ¹	14	5	8	25	14
Don't know	9	1	1	3	2

¹“Other” includes fire department, police department, urgent care center, pharmacy, family member, friend, store, product manufacturer, government agency or office, and would not call for help.

NOTE: Percents based on fewer than 30 cases are italicized.

Table 4B.—First organization or person to call for poison assistance or information identified by the general public in ten hypothetical situations: 2011— continued

Where would you go for information or help first?	Spouse was helping clean the house but is now having difficulty breathing	Heard on the news about an egg recall in the state	Arm became very swollen after an insect bite	Heard on the radio the city's water supply has been contaminated	Carbon monoxide detector goes off in the middle of the night
Number of respondents assigned to scenario....	760	820	776	789	797
Poison center/Poison Help line:					
Total percent	5%	3%	2%	2%	1%
Total number of cases	37	21	17	13	10
911	59	1	12	3	28
Health Professional	11	2	41	0	0
Hospital/Emergency room.....	11	0	29	1	0
Internet/Online	0	6	1	2	1
Other ¹	11	66	14	81	61
Don't know	1	21	0	11	7

¹“Other” includes fire department, police department, urgent care center, pharmacy, family member, friend, store, product manufacturer, government agency or office, and would not call for help.

NOTE: Percents based on fewer than 30 cases are italicized.

Table 5.—Selection of a poison center as the first point of contact in select hypothetical situations¹, by selected demographic characteristics: 2011

Respondent Characteristic	Looking for general information to prevent poisoning	Neighbor's child drank windshield wiper fluid	Young child swallowed several adult vitamins	Feeling ill after using pesticide in the garden	Older person thinks he took high blood pressure medication twice
Total percent	43%	32%	29%	29%	7%
Total number of cases	342	262	244	232	54
Race/Ethnicity					
A. White, non-Hispanic	46	34	32	34 ^{BC}	7
B. African American, non-Hispanic	40	24	22	18	5
C. Hispanic	39	35	27	20	6
D. All other races	34	22	28	32	2
Sex					
E. Female	43	36	32	27	6
F. Male	42	28	27	32	7
Age					
G. 18-24	44	39 ^J	26	33 ^J	5
H. 25-44	43	36 ^J	36 ^J	37 ^{JI}	9 ^J
I. 45-64	45	32 ^J	31 ^J	26 ^J	8 ^J
J. 65 or older	37	18	16	15	1
Level of education					
K. High school or less	46	33	25	28	6
L. Some college	41	36	32	32	9
M. College graduate or higher	38	32	30	29	20
Household income					
N. Less than \$25,000	43	36	27	26	6
O. \$25,001 to \$50,000	57 ^{PQ}	43	35	36	8
P. \$50,001 to \$75,000	37	31	25	28	13
Q. Over \$75,000	41	33	31	29	6
Household status					
R. Children under age 18	45	40 ^T	32	31	8
S. Children age 5 or younger	43	44 ^T	37	32	8
T. Households without children	42	27	28	27	6
Region					
U. New England	59	27	26	0	2
V. Mid-Atlantic	36	28	26	3	5
W. Outer South	43	31	31	1	9
X. Deep South	41	35	31	4	6
Y. Great Lakes	49	33	41 ^{VBB}	0	3
Z. Farm Belt	31	44	36	1	7
AA. Mountain	46	35	24	0	12
BB. Pacific	41	31	20	4	10
Insurance status					
CC. Employer/Union	43	32	30	2 ^{EE}	8 ^{EE}
DD. Self-Purchased	45	24	26	3 ^{EE}	7 ^{EE}
EE. Medicare	43	30	23	3	1
FF. Medicaid	36	36	30	5	4
GG. Health Savings Account	29	25	32	0	12 ^{EE}
HH. No Insurance	39	39	23	1	7

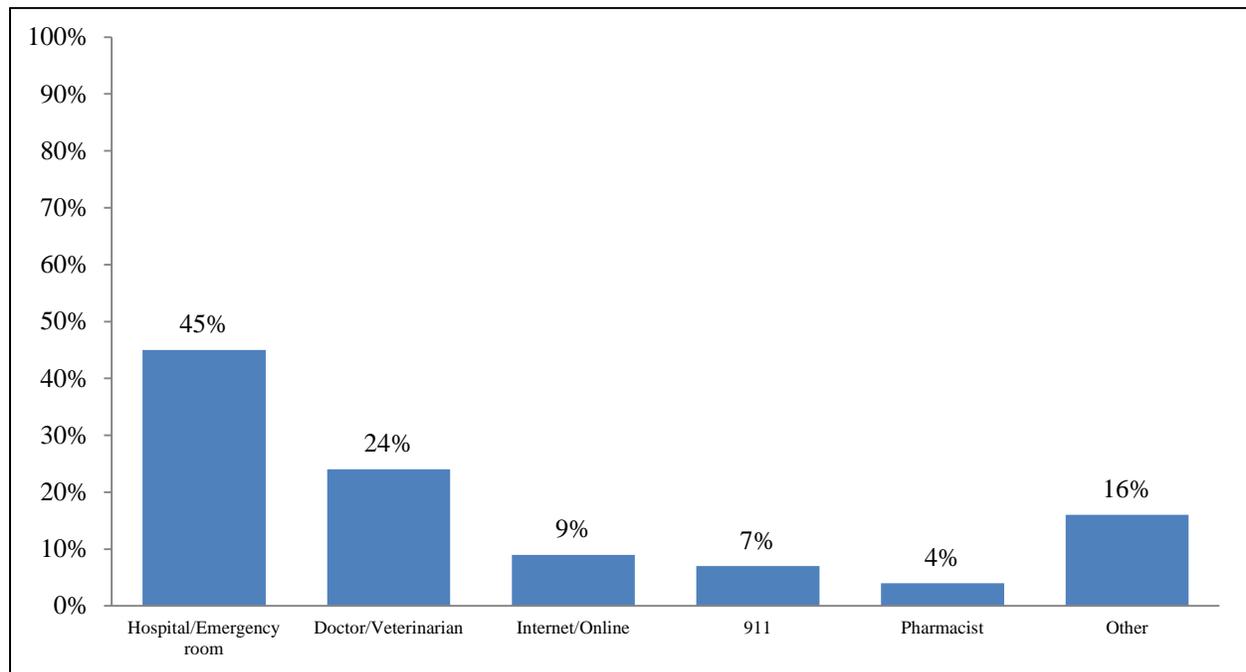
¹Only scenarios in which at least 50 people named a poison center or the *Poison Help* line as their first point of contact are displayed.

NOTE: Significance at p < .05 is indicated by a > b > c, etc. Only differences of 5% or more are noted. Percents based on fewer than 30 cases are italicized.

3.4.3 Alternatives to Poison Centers

Respondents who indicated they had contacted a poison center in the past year for information or help related to a poisoning were asked what they would have done if a poison center had not been available. Hospitals and emergency rooms were mentioned most often, followed by a doctor, health professional or veterinarian (Figure 2).

Figure 2.—Organizations or persons to be contacted for poison information or assistance in the absence of a poison center, among those who called in the past year¹: 2011



¹Question asked of respondents who indicated they had contacted a poison center or the national 1-800 number in the previous year.

3.5 Awareness of and Access to *Poison Help* line

3.5.1 Awareness of 1-800-222-1222

In contrast to awareness of poison centers and some *Poison Help* message points, awareness of 1-800-222-1222 was low (Table 6). Just 4 percent of people were able to provide this number spontaneously as the access point for obtaining poison information and assistance from a poison control center. Overall, two-thirds of respondents (66 percent) could not provide any telephone number they believed could be used to contact a poison control center (data not shown in table).

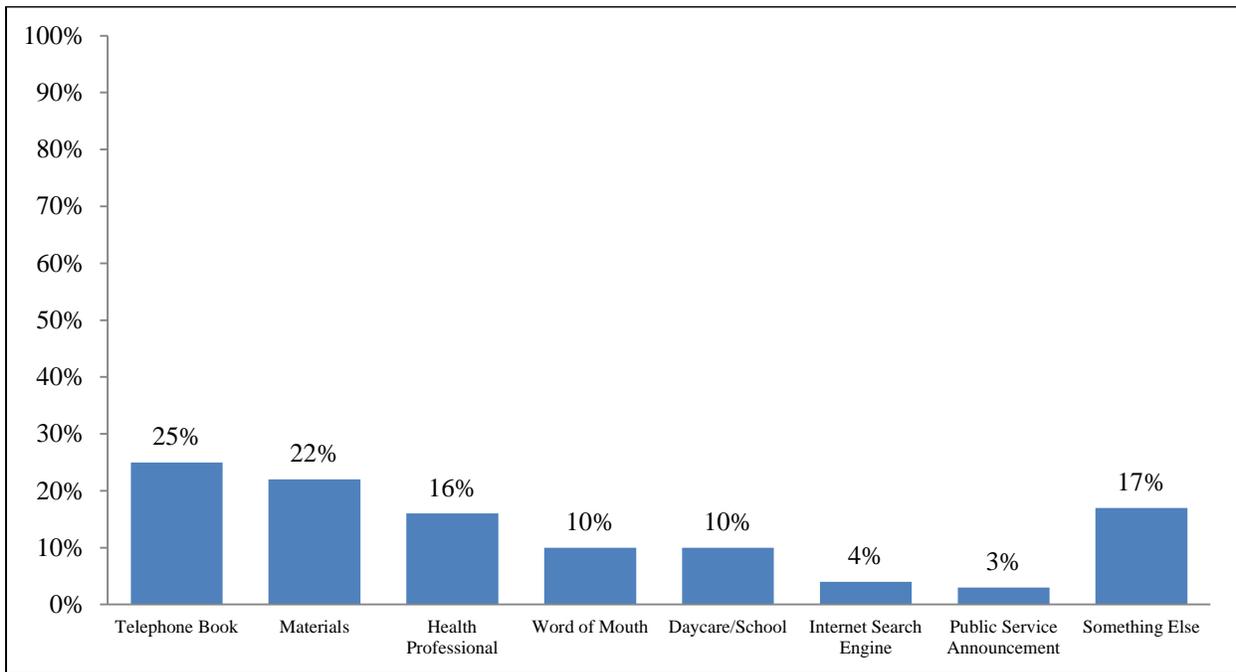
Of those who could correctly identify 1-800-222-1222, one-quarter (25 percent) learned about the toll-free number from a telephone book (Figure 3, multiple responses allowed). This was followed by materials (22 percent), health professional (16 percent), word of mouth (10 percent), and daycare or school (10 percent).

Table 6.—Spontaneous recall of 1-800-222-1222, by selected characteristics: 2011

Respondent characteristic	1-800-222-1222
Total percentage	4%
Total number of cases	70
Race/Ethnicity	
White, non-Hispanic	4
African American, non-Hispanic	3
Hispanic	<i>1</i>
All other races.....	3
Sex	
Female	4
Male.....	3
Age	
18-24.....	2
25-44.....	5
45-64.....	4
65 or older.....	<i>1</i>
Level of education	
High school or less.....	3
Some college.....	4
College graduate or higher.....	4
Household income	
Less than \$25,000	3
\$25,001 to \$50,000	3
\$50,001 to \$75,000	6
Over \$75,000	3
Household status	
Children under age 18.....	6
Children under age 5.....	8
All other households	2
Region	
New England	3
Mid-Atlantic	3
Outer South.....	5
Deep South	3
Great Lakes.....	3
Farm Belt	8
Mountain.....	3
Pacific	2
Insurance status	
Employer/Union	4
Self-Purchased.....	2
Medicare.....	2
Medicaid.....	4
Health Savings Account.....	5
No Insurance.....	5

NOTE: Percents based on fewer than 30 cases are italicized.

Figure 3.—Source of 1-800-222-1222 information among those aware of the *Poison Help* line¹: 2011



¹Question asked of 70 respondents; multiple responses allowed

3.5.2 Locating a Poison Center Telephone Number

People who did not know the national toll-free number were asked where they would look for the telephone number to reach a poison center. People were most likely to say they would look in a telephone book (42 percent, Table 7). Twenty-two percent would use Google, Yahoo or another Internet search engine, 12 percent would call 911, 9 percent would call 411/directory assistance, 5 percent would check their emergency numbers, and another 5 percent would check their poison prevention materials/magnet/sticker.

Table 7.—Sources for locating a poison center telephone number among those unaware of 1-800-222-1222, by selected characteristics: 2011

Respondent characteristic	Telephone book	Google/Yahoo/Search Engine	911	411/directory assistance	Poison prevention materials
Total percent	42%	22%	12%	9%	5%
Total number of cases	810	426	230	177	88
Race/Ethnicity					
A. White, non-Hispanic.....	43 ^D	22	12	8	5 ^B
B. African American, non-Hispanic.....	48 ^D	18	14	11	2
C. Hispanic	39	23	9	13	3
D. All other races	28	29	15	6	5
Sex					
E. Female.....	44	19	8	11 ^F	6 ^F
F. Male	40	25 ^E	16 ^E	7	3
Age					
G. 18-24	27	39 ^{HIJ}	5	4	3
H. 25-44	38 ^G	28 ^{JI}	10	8	6 ^J
I. 45-64	48 ^{GI}	19	13	12 ^{GH}	5
J. 65 or older	50	4	19 ^{GHI}	9 ^G	3
Level of education					
K. High school or less	52 ^{LM}	12	10	10	4
L. Some college	38	28 ^K	11	9	5
M. College graduate or higher	32	35 ^{KL}	13	8	5
Household income					
N. Less than \$25,000.....	52 ^{PQ}	11	8	14 ^{PQ}	2
O. \$25,001 to \$50,000.....	45 ^Q	18 ^N	9	9	7 ^{NP}
P. \$50,001 to \$75,000.....	38	26 ^{NO}	15 ^N	8	3
Q. Over \$75,000.....	35	37 ^{NOP}	13	7	26 ^N
Household status					
R. Children under age 18	37	25 ^T	10	11	7 ^T
S. Children age 5 or younger	35	27	6	9	8 ^T
T. Households without children	46 ^{RS}	20	13 ^S	8	3
Region					
U. New England.....	34	12	19	16	4
V. Mid-Atlantic.....	40	22	14 ^{XAA}	13 ^{XY}	7 ^{BB}
W. Outer South	38	21	9	9	7 ^{BB}
X. Deep South.....	51 ^{UVWBB}	18	7	7	3
Y. Great Lakes	49 ^{WBB}	19	14 ^{XAA}	5	4
Z. Farm Belt.....	45	19	13	8	3
AA. Mountain	43	29 ^U	6	7	3
BB. Pacific.....	33	32 ^{UVWXY}	15 ^{XAA}	14 ^{XY}	2
Insurance status					
CC. Employer/Union.....	36	29 ^{DDEEFF}	12	9	5
DD. Self-Purchased.....	40	16	17 ^{HH}	9	5
EE. Medicare.....	49 ^{JCCDD}	11	17 ^{EE}	7	3
FF. Medicaid.....	46 ^{CC}	14	12	12	5
GG. Health Savings Account	43	28 ^{DDEEFFHH}	12	12	6
HH. No Insurance	55 ^{JCCDD}	13	7	12	4

NOTE: Only the five most frequently mentioned responses are shown. Significance at $p < .05$ is indicated by $a > b > c$, etc. Only differences of 5% or more are noted. Data are from 97 percent of the population who were eligible for the question (1930 respondents). Percents based on fewer than 30 cases are italicized.

3.5.3 Access to Poison Control Center Number

The survey also measured whether people have the telephone number for a poison control center posted in their homes and, among cell phone owners, whether the number is programmed into their phones. One-quarter of adults (26 percent) have the poison center number posted in their home (Table 8). Eighty-seven percent of respondents indicated they own a cellular or wireless telephone. Three percent of cell phone owners have a poison control center number programmed into their cell phones.²¹

²¹ 3.3 percent of respondents who own a cell phone had the number programmed into their phone. This figure represents 2.9 percent of all survey respondents.

Table 8.—Access to poison center number via home postings and cell phone contacts, by selected characteristics: 2011

Respondent characteristic	Number posted in home	Number programmed in cell phone ¹
Total percent	26%	3%
Total number of cases	516	58
Race/Ethnicity		
A. White, non-Hispanic	24	4
B. African American, non-Hispanic	22	2
C. Hispanic	19	6
D. All other races		
Sex	28	3
E. Female	24	3
F. Male		
Age	23 ^I	5
G. 18-24	32 ^{GJ}	3
H. 25-44	25 ^J	3
I. 45-64	18	4
J. 65 or older		
Level of education	25	3
K. High school or less	25	5
L. Some college	27	3
M. College graduate or higher		
Household income	23	4
N. Less than \$25,000	28	4
O. \$25,001 to \$50,000	27	3
P. \$50,001 to \$75,000	30	2
Q. Over \$75,000		
Household status	35	4
R. Children under age 18	42	5
S. Children age 5 or younger	20	3
T. Households without children		
Region		
U. New England	24	2
V. Mid-Atlantic	27	3
W. Outer South	29 ^X	3
X. Deep South	19	4
Y. Great Lakes	28 ^X	3
Z. Farm Belt	23	3
AA. Mountain	34 ^{XBB}	1 ^{AA}
BB. Pacific	22	5
Insurance status		
CC. Employer/Union	28 ^{HH}	3
DD. Self-Purchased	26	4
EE. Medicare	22	5
FF. Medicaid	26	3
GG. Health Savings Account	27	7
HH. No Insurance	18	2
Interview language		
II. English	26 ^V	3
JJ. Spanish	12	2

¹Percentages are among cell phone owners (1735 respondents). NOTE: Significance at p < .05 is indicated by a > b > c, etc. Only differences of 5% or more are noted. Percents based on fewer than 30 cases are italicized.

4. CONCLUSIONS

The primary objectives of the *Poison Help* campaign are to increase awareness of the national toll-free number to access poison information assistance and to increase awareness of poison centers and the services they provide. Measures of the campaign's effectiveness overall were mixed. Few people were able to spontaneously recall the national toll-free number. Awareness of *Poison Help* and/or poison centers was 46 percent. Recall of 1-800-222-1222 was 4 percent. While promotion efforts were undertaken nationally and locally to instill this new emergency number in the minds of the public since its creation in 2002, continued promotion and education effort overtime are needed to further raise awareness of the number.

Most people could not recall any telephone number to reach a poison center, and people tend not to rely on poison prevention materials to locate one. Instead, people rely on telephone books and Internet search engines such as Google or Yahoo to find a telephone number. People age 45 and older are more likely to rely on telephone books, while people under the age of 45 are more likely to turn to the Internet. This suggests the importance of reaching younger populations through digital means. Future campaign messages or initiatives should not only encourage people to post magnets and stickers in their households, but also program the toll-free number into the cell phones and visit and bookmark the *Poison Help* Web site for information. More research could be done to understand current use patterns of digital technologies such as Smartphone and tablet computer applications ("apps") and online live chat sessions, and whether such tools would be useful to people in both emergency and non-emergency situations.

While 46 percent referenced poison centers in some capacity without being prompted, knowledge about how poison centers operate and who they serve was more mixed. Most people were unaware that calls are answered by medical experts, calls were confidential, and there are multiple poison centers serving local areas. However, knowledge levels do appear to have increased in two areas since 2006: hours of operation, and who answers calls. Recall of the hours of operation increased from 58 percent in 2006 to 74 percent in 2011, with slight variations in question wording. When asked who answers calls and given a list of possible responses, in 2006, 19 percent of respondents indicated calls were answered by "specially trained nurses, pharmacists, and doctors." In 2011, 25 percent of respondents selected the response "expert medical professionals" from a list of possible answers.

Adults aged 65 and older and people with annual incomes below \$25,000 would benefit from additional education outreach, as these populations expressed the lowest level of knowledge about poison centers

and their operations and services, and are also are a greater need for poison center services. Hispanics, African Americans, and people of other races would also benefit from additional education outreach.

People are more likely to identify a poison center as their first information source when seeking general information or in non-emergency situations. When asked where they would go for general information to prevent poisoning, 43 percent named a poison center or the *Poison Help* line. When asked where they would call if their neighbor's child drank windshield wiper fluid, one in three people said they would call a poison center first, compared to one in four who gave a similar response in 2006. While the number of people who indicated they would contact a poison center in this situation increased, 911 remained the top choice for respondents in this situation. Similarly, 29 percent said they would contact a poison center if a young child swallowed adult vitamin pills, while 29 percent said they would call 911. When presented with the concrete prospect of a child in danger, people may opt for 911 for a variety of reasons, such as a greater familiarity and/or comfort level with 911 services, or a perception that 911 would provide a quicker or better response. Future campaign efforts should continue to position poison centers as an emergency first responder, while highlighting the differences between when a person should call 911 (if someone is unconscious or has trouble breathing) and when a person should call 1-800-222-1222.

A small proportion of people sought assistance from poison centers for a possible poisoning or requested prevention information in the past year. Of these, 59 percent did so to obtain treatment advice, while 23 percent called to find out whether a possible poisoning exposure was a serious health risk. Very few people who had called a poison center in the last year volunteered that they did so to request general information. This suggests additional effort must be made to highlight the preventative educational services.

The data also suggest shifts in how people obtain information. In 2006, among people who did not know the national toll-free number to reach a poison center, 62 percent said they would look in a telephone book, compared to 42 percent in 2011. Reliance on 411/directory assistance seems to have decreased, from 13 percent in 2006, to just 9 percent in 2011. More people are also turning to the Internet as a source of information, from 6 percent who said they would look on the Internet in 2006, compared to 25 percent who relied on online sources in 2011 (total combined responses of Internet search engine, HRSA Web site, and other online sources).

Only one in ten people said they did not know where to call for general poison prevention information, compared to one in five who did not know where to call in 2006. Since the public views poison centers as a primary and trusted resource for reliable poison information, this is an important indication that

continued education outreach is needed and that poison centers can play an important role in increasing awareness of general poison information.

Finally, two subgroups of particular interest for this survey were households with children age 5 and younger, and adults age 65 and older. Households with children under the age of five are important because 51 percent of unintentional poisonings involve children in this age group.²² Adults in households with children had higher awareness of *Poison Help* and poison centers than households without children, and were more likely to know the national toll-free number than other households. This suggests that the campaign's efforts targeted to parents and households with children has been more effective. Adults ages 65 and older were important because although the incidence of poisonings among this group is relatively small (6 percent), older adults account for 20 percent of exposure fatalities. Adults ages 65 and older had lower aided awareness of poison centers and the national toll-free number and were less likely to know about poison center operations and services. This suggests that more campaign efforts targeted to older adults are necessary.

²² 2010 Annual Report of the American Association of Poison Control Centers National Poison Data System.

APPENDIX A

***POISON HELP* CAMPAIGN
GENERAL POPULATION SURVEY**

POISON HELP

GENERAL POPULATION SURVEY SCREENER

S1. Hello, this is (INTERVIEWER) and I'm calling for the Health Resources and Services Administration, HRSA, about a research study. Are you a member of this household and at least 18 years old?

- YES..... 1 (GO TO S3)
- NO..... 2 (GO TO S2)
- PROBABLE BUSINESS..... 3 (GO TO S3)

S2. May I please speak with a household member who is at least 18 years old?

- AVAILABLE..... 1 (GO TO S1)
- NOT AVAILABLE 2 (GO TO RESULT, CALLBACK APPT.)
- THERE ARE NONE 3 (GO TO THANK2)

S3. Is this phone number used for...

- Home use, 1 (CONTINUE)
- Home and business use, or..... 2 (CONTINUE)
- Business use only?..... 3 (GO TO THANK1)

BOX 1
Go to extended interview.

THANK 1. Thank you, but we are only interviewing in residences.

THANK 2. These are all the questions I have at this time. Thank you very much for your time.

Public Burden Statement:

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number for this project is 0915-0343. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: HRSA Reports Clearance Officer, 5600 Fishers Lane, Room 10-49, Rockville, MD 20857.

POISON HELP

GENERAL POPULATION SURVEY

INTRO 1. We are contacting households across the nation to conduct a brief survey to learn how people get safety information. This voluntary interview will take about 10 minutes, and the information you give will be private. If you're ready, let's begin.

[INTERVIEWER NOTE: IF RESPONDENT ANSWERS TELEPHONE IN SPANISH OR REQUESTS SPANISH-LANGUAGE, READ INTRODUCTION IN SPANISH]

INTERVIEWER RECORD LANGUAGE:

- 1 ENGLISH
- 2 SPANISH

- R1. First, I'm going to read descriptions of situations that might happen. Please tell me what you would do if that happened to you. What if...

[RANDOMLY ASSIGN RESPONDENTS TO 4 SCENARIOS]

- A. A young child swallowed several adult vitamin pills
- B. An older person visiting your household says that he may have taken his high blood pressure medication twice by mistake
- C. A neighbor runs in and says she needs help because her child drank windshield wiper fluid
- D. You think you have an insect bite and your arm becomes very swollen from wrist to elbow
- E. You are looking for general information about ways to prevent poisoning
- F. You hear on the news that there has been a recall of eggs in your State
- G. The alarm on your carbon monoxide detector goes off in the middle of the night
- H. You were using pesticides in your garden and now you are feeling ill
- I. You hear on the radio that the water supply in your city has been contaminated and you are worried about whether it is safe to drink and use
- J. Your spouse was helping you with cleaning the house, but is now having difficulty breathing

[INTERVIEWER PROMPT: "What would you go for information or help if this happened?"]

[DO NOT READ ANSWER CHOICES; SELECT ONLY ONE RESPONSE]

- 1 POISON CENTER/POISON CONTROL CENTER/PCC
- 2 911/RESCUE SQUAD/EMT
- 3 FIRE DEPARTMENT
- 4 POLICE DEPARTMENT
- 5 DOCTOR/NURSE/HEALTH PROFESSIONAL
- 6 PHARMACIST/PHARMACY
- 7 HOSPITAL/EMERGENCY ROOM
- 8 URGENT CARE
- 9 FAMILY MEMBER
- 10 FRIEND
- 11 INTERNET/ONLINE (Specify: _____)
- 12 NOTHING/WOULD NOT SEEK HELP
- 91 OTHER (Specify: _____)
- 98 DON'T KNOW
- 99 REFUSED

- R2. In the past year, have you sought information or help related to a poisoning?

- 1 YES
- 2 NO
- 98 DON'T KNOW
- 99 REFUSED

[IF R2:1 YES, ASK R3. ALL OTHERS SKIP TO R5]

- R3. In your own words, please describe the reason you sought information or help related to a poisoning.

[RECORD RESPONDENT ANSWER EXACTLY]

- 98 DON'T KNOW
- 99 REFUSED

- R4. Please tell me where you sought information or help. [DO NOT READ / CODE ALL THAT APPLY]

- 1 POISON CENTER/POISON CONTROL CENTER/PCC
- 2 1-800-222-1222 / POISON Help line / POISON 1-800 NUMBER / POISON HOTLINE
- 3 911/RESCUE SQUAD/EMT
- 4 FIRE DEPARTMENT
- 5 POLICE DEPARTMENT
- 6 DOCTOR/NURSE/HEALTH PROFESSIONAL
- 7 PHARMACIST/PHARMACY
- 8 HOSPITAL/EMERGENCY ROOM
- 9 URGENT CARE
- 10 FAMILY MEMBER
- 11 FRIEND
- 12 INSURANCE COMPANY / INSURANCE ADVICE LINE / NURSE HELP LINE
- 13 INTERNET ONLINE (SPECIFY WEB SITE: _____)
- 91 OTHER (Specify: _____)
- 98 DON'T KNOW
- 99 REFUSED

[IF R2:2-99 DID NOT SEEK HELP OR INFORMATION OR R4:3-99 DID NOT CONTACT POISON CONTROL CENTER, ASK R5]

- R5. In the past year, did you contact a poison control center for information or help related to a poisoning?

- 1 YES
- 2 NO
- 98 DON'T KNOW
- 99 REFUSED

[IF R4:1-2 OR R5:1 RESPONDENT CONTACTED POISON CONTROL CENTER, ASK R6]

R6. If a poison control center had not been available, what would you have done?

[RECORD RESPONDENT ANSWER EXACTLY]

- 98 DON'T KNOW
- 99 REFUSED

[ASK ALL RESPONDENTS]

R7. What telephone number would you use to contact a poison control center? [DO NOT READ, WAIT FOR RESPONSE]

- 1 1-800-222-1222
- 2 OTHER 800 OR 888 NUMBER (Specify: _____)
- 3 OTHER 800 or 888 NUMBER, not specified
- 4 OTHER NUMBER, NOT 800 (Specify: _____)
- 5 OTHER NUMBER, NOT 800, not specified
- 6 911
- 98 DON'T KNOW
- 99 REFUSED

[IF R7 NOT PUNCH 1, DID NOT NAME 1-800-222-1222, ASK]

R8. If you needed to contact a poison control center immediately, where would you look for the telephone number? [DO NOT READ / CODE ALL THAT APPLY]

- 1 POISON PREVENTION MATERIALS/MAGNET/STICKERS
- 2 TELEPHONE BOOK
- 3 411/DIRECTORY ASSISTANCE
- 4 911
- 5 PROGRAMMED IN MY CELLULAR PHONE
- 6 HRSA WEB SITE
- 7 POISON CONTROL CENTER WEB SITE
- 8 GOOGLE/YAHOO/SEARCH ENGINE
- 9 OTHER INTERNET OR ONLINE/SPECIFY: _____
- 10 OTHER/SPECIFY: _____
- 98 DON'T KNOW
- 99 REFUSED

[IF R8:1 WOULD CALL 1-800-222-1222 TO CONTACT A POISON CONTROL CENTER, ASK]

R9. How did you learn about 1-800-222-1222? [DO NOT READ/CODE ALL THAT APPLY]

- 1 LOCAL POISON CONTROL CENTER
- 2 PUBLIC SERVICE ANNOUNCEMENT/TV/RADIO
- 3 BROCHURE/MAGNET/STICKERS
- 4 POSTER
- 5 NEWSPAPER ARTICLE/MAGAZINE ARTICLE
- 6 NEWSPAPER ADVERTISEMENT
- 7 OUTDOOR ADVERTISING/BILLBOARD/BUS ADVERTISEMENT
- 8 TELEPHONE BOOK
- 9 411/INFORMATION/DIRECTOR ASSISTANCE
- 10 DOCTOR/NURSE/HEALTH PROFESSIONAL
- 11 PHARMACIST/PHARMACY
- 12 WORD OF MOUTH/RELATIVE/FRIEND/COWORKERS
- 13 DAYCARE/SCHOOL/TEACHER
- 14 HRSA WEB SITE
- 15 POISON CONTROL CENTER WEB SITE
- 16 GOOGLE/YAHOO/SEARCH ENGINE
- 17 OTHER ADVERTISING/SPECIFY: _____
- 18 OTHER INTERNET OR ONLINE/SPECIFY: _____
- 91 OTHER/Specify: _____
- 98 DON'T KNOW
- 99 REFUSED

[IF R9:1-6 ADVERTISING AND MATERIALS, ASK]

R10. Where did you (see/receive) the material that had information about 1-800-222-1222? [DO NOT READ/CODE ALL THAT APPLY]

- 1 POISON CENTER / POISON CONTROL CENTER
- 2 DOCTOR/NURSE/HEALTH PRACTITIONER/OFFICE
- 3 PHARMACIST/PHARMACY
- 4 FIRE DEPARTMENT
- 5 POLICE DEPARTMENT
- 6 STORE
- 7 LIBRARY
- 8 HOSPITAL/EMERGENCY ROOM
- 9 RELATIVE/SPOUSE/PARENT/SIBLING
- 10 FRIEND/NEIGHBOR/COWORKER
- 11 DAYCARE/SCHOOL/TEACHER
- 12 COMMUNITY EVENT
- 13 HRSA WEBSITE
- 14 POISON CENTER WEB SITE
- 15 GOOGLE/YAHOO/SEARCH ENGINE
- 16 OTHER INTERNET OR ONLINE/SPECIFY: _____
- 91 OTHER/Specify: _____
- 98 DON'T KNOW
- 99 REFUSED

[ASK ALL]

R11. Do you have a cellular or wireless telephone?

- 1 YES
- 2 NO
- 98 DON'T KNOW
- 99 REFUSED

[IF R10:1 YES, OWN WIRELESS TELEPHONE, ASK]

R12. Do you have a poison control center number programmed in that telephone?

- 1 YES
- 2 NO
- 98 DON'T KNOW
- 99 REFUSED

[ASK ALL RESPONDENTS]

R13. Do you have a poison control center number posted in your home?

- 1 YES
- 2 NO
- 98 DON'T KNOW
- 99 REFUSED

[ASK ALL RESPONDENTS]

INTERVIEWER: Now, I would like to ask you some questions about poison control centers. Please answer based on what you know. If you do not know the answer, please tell me and we'll move on to the next question.

R14. To the best of your knowledge... [ROTATE]

- 1 is there a single poison control center that serves the entire nation OR
- 2 are there multiple poison control centers that serve local areas?
- 98 Don't know
- 99 REFUSED

R15. When are poison control centers open to respond to your call? [RANDOMIZE]

- 1 24 hours a day, 7 days per week, 365 days a year
- 2 Monday through Friday, 9am to 5pm
- 3 Weekends only OR
- 98 Don't know
- 99 REFUSED

R16. Who answers calls to poison control centers? [ROTATE]

- 1 Expert medical professionals
- 2 Trained volunteers OR
- 98 Don't know
- 99 REFUSED

R17. If you do not speak English, can a poison control center still help you? [ROTATE]

- 1 Yes
- 2 No
- 98 Don't know
- 99 REFUSED

- R18. When you call a poison control center about a person who may have been poisoned, how much does it cost to receive information? [ROTATE]
- 1 Nothing, the call is free
 - 2 A maximum of \$25 (twenty-five dollars) OR
 - 98 Don't know
 - 99 REFUSED
- R19. When you call a poison control center, what other organizations or individuals have access to the information you provided? [RANDOMIZE, CHECK ALL THAT APPLY]
- 1 No one, it is kept confidential
 - 2 Your health care provider
 - 3 Your Insurance company
 - 4 Law enforcement
 - 5 Social services
 - 98 DON'T KNOW
 - 99 REFUSED
- R20. Who do you think uses poison control services? Please select all that apply [RANDOMIZE / ACCEPT MULTIPLE RESPONSES]
- 1 Anyone/ Everyone
 - 2 Law Enforcement Officers
 - 3 Health Care Providers
 - 4 Individuals who care for young children
 - 5 Someone else [SPECIFY: _____]
 - 6 NONE OF THE ABOVE
 - 98 DON'T KNOW
 - 99 REFUSED

R21 INTRO Now, just a few questions about you and your household.

R21. [READ IF NECESSARY] Are you male or female?

- 1 MALE
- 2 FEMALE
- 98 DON'T KNOW
- 99 REFUSED

R22. How old are you? Are you... [READ EACH CATEGORY]

- 1 18-24
- 2 25-34
- 3 35-44
- 4 45-54
- 5 55-64
- 6 AGE 65 OR OLDER
- 98 DON'T KNOW
- 99 REFUSED

R23. What is the highest grade or level of school you have completed? [DO NOT READ, CODE ONLY ONE RESPONSE]

- 1 NO SCHOOLING OR GRADES 1-8
- 2 SOME HIGH SCHOOL OR GRADES 9-11
- 3 GRADE 12, HIGH SCHOOL DIPLOMA, OR GED
- 4 VOCATION/TECHNICAL SCHOOL OR SOME COLLEGE, BUT NO BACHELOR'S DEGREE
- 5 BACHELOR'S DEGREE, B.A. OR B.S.
- 6 MORE THAN A BACHELOR'S DEGREE, POST-GRADUATE COURSES, M.D., PhD, LAW SCHOOL, ETC.
- 98 DON'T KNOW
- 99 REFUSED

[IF R23:1-3 HIGH SCHOOL DIPLOMA, EQUIVALENT OR LESS, ASK]

R24. Do you have a high school diploma or its equivalent, a GED?

- 1 YES
- 2 NO
- 98 DON'T KNOW
- 99 REFUSED

R25. Are you of Spanish, Hispanic, or Latino origin?

- 1 YES
- 2 NO
- 98 DON'T KNOW
- 99 REFUSED

R26. How would you describe your race? You may choose more than one. [RANDOMIZE, READ CHOICES, CODE ALL THAT APPLY.]

- 1 WHITE
- 2 BLACK OR AFRICAN-AMERICAN
- 3 AMERICAN INDIAN OR ALASKA NATIVE
- 4 ASIAN
- 5 NATIVE HAWAIIAN OR PACIFIC ISLANDER
- 98 DON'T KNOW
- 99 REFUSED

Now I have just a few questions about your household.

R27. Do any people under age 18 live in this household?

- 1 YES
- 2 NO
- 98 DON'T KNOW
- 99 REFUSED

[IF R27:1 YES, ASK]

R28. Do any people age 5 or younger live in this household?

- 1 YES
- 2 NO
- 98 DON'T KNOW
- 99 REFUSED

[IF R28:1 YES ASK]

R29. Are you a parent or guardian of any of these children age 5 and younger?

- 1 YES
- 2 NO
- 98 DON'T KNOW
- 99 REFUSED

[ASK ALL]

R30. Which of the following best describes your health insurance coverage? You may choose more than one. [RANDOMIZE 1-5, READ 6 LAST, ACCEPT MULTIPLE RESPONSES]

- 1 Health insurance offered through your employer or union
- 2 Health insurance purchased yourself
- 3 Medicare
- 4 Medicaid
- 5 Health savings account, or HSA
- 6 No health insurance coverage
- 91 SOMETHING ELSE (SPECIFY: _____)
- 98 DON'T KNOW
- 99 REFUSED

R31. What was the total income of all persons in your household over the past year, including salaries or other earnings, interest, retirement, and so on for all household members? Was it... [READ IN ORDER UNTIL RESPONSE CHOSEN]

- 1 LESS THAN \$25,000
- 2 \$25,000 TO \$50,000
- 3 \$50,001 TO \$75,000
- 4 \$75,001 TO \$100,000
- 5 \$100,001 TO \$150,000
- 6 \$150,001 OR MORE
- 98 DON'T KNOW
- 99 REFUSED

R32. What is your zip code? [RECORD]

ZIP CODE _ _ _ _ _

THANK Those are all the questions I have for you. Thank you very much for your time. I would like to give you a telephone number in case you are interested in receiving more information about poison prevention or the ways that poison control centers can help in a poison emergency. The number you can call is 1-800-222-1222. This number works from any place in the country and connects you to a local poison control center where health care professionals and other poison experts provide treatment advice about poisonings and poison prevention information 24 hours a day, every day of the year. There is no cost for the service. It is free and confidential. Translation services are available in over 160 languages.

APPENDIX B

***POISON HELP* EVALUATION
2006 GENERAL POPULATION SURVEY**

POISON HELP EVALUATION

2006 GENERAL POPULATION SURVEY

INTRO1. [Hello, this is [INTERVIEWER] and I'm calling for the Centers for Disease Control and Prevention, the CDC. We are contacting households across the nation to conduct a brief survey to learn how people get information to help prevent poisonings.] This voluntary interview will take about 8 minutes, and the information you give will be private. If you're ready, let's begin.

R1. In the past year, have you contacted any person or organization for information on ways to prevent poisonings or for help with a possible poisoning?

- YES 1 (GO TO R2)
- NO 2 (GO TO R4)
- REFUSED..... -7 (GO TO R4)
- DON'T KNOW..... -8 (GO TO R4)

R2. Please tell me all the persons or organizations you have contacted. [CODE ALL THAT APPLY.]

- a. POISON CONTROL CENTER (PCC)..... 1 (GO TO BOX 1)
- b. 911/RESCUE SQUAD..... 2 (GO TO BOX 1)
- c. FIRE DEPARTMENT/POLICE DEPARTMENT..... 3 (GO TO BOX 1)
- d. DOCTOR/NURSE/PHARMACIST/HEALTH PROFESSIONAL..... 4 (GO TO BOX 1)
- e. HOSPITAL/EMERGENCY ROOM/URGENT CARE..... 5 (GO TO BOX 1)
- f. FAMILY MEMBER/FRIEND..... 6 (GO TO R4)
- g. INTERNET 7 (GO TO R4)
- h. BOOK/LIBRARY 8 (GO TO R4)
- i. OTHER (specify)..... 91 (GO TO R4)
- REFUSED -7 (GO TO R4)
- DON'T KNOW -8 (GO TO R4)

BOX 1

Ask R3 for each of R2a-e=1 (R contacted a poison control center, 911, fire/police, medical personnel, or hospital for poison information or help).

R3. Was the reason for your call to (a/the) (DISPLAY R2 RESPONSE)... [CODE ALL THAT APPLY]

- a. To get treatment advice for an emergency 1
- b. To find out whether a possible poisoning was a serious health risk, or..... 2
- c. To get general information about how to prevent poisoning?. 3
- OTHER (specify)_____ 4
- REFUSED..... -7
- DON'T KNOW..... 8

R4. Now I am going to read some statements about poison prevention and I would like you to tell me whether or not you have heard these ideas before. If you're not sure, you can say so. [RANDOM ORDER.]

	YES	NO	(IT DEPENDS)	DON'T KNOW/ NOT SURE	REF
a. Have you heard that most poisonings are preventable by taking simple precautions? 1		2	3	4	-7
b. Have you heard that even medicines with child safety caps should be stored in a place that a child cannot get into?	1	2	3	4	-7
c. Have you heard that labels on medicines should be read each and every time the medicine is taken?.....	1	2	3	4	-7
d. Have you heard that household products should always be stored in their original containers?	1	2	3	4	-7
e. Have you heard to turn on fans and open windows when using toxic household products?.....	1	2	3	4	-7
f. Have you heard that to avoid possible harmful drug interactions, doctors should be told about every medication a person takes?	1	2	3	4	-7

R5. Next I'd like your opinion. I'm going to read descriptions of situations that might happen. Please tell me where you would call for help first if that happened to you. What if...

BOX 2

Ask R5a-e random.

a. A young child swallowed several adult vitamin pills. [Where would you first call for help?]

- POISON CONTROL CENTER (PCC) 1
- 911/RESCUE SQUAD 2
- FIRE DEPARTMENT/POLICE DEPARTMENT 3
- HOSPITAL/EMERGENCY ROOM/URGENT CARE 4
- DOCTOR/NURSE/PHARMACIST/HEALTH
PROFESSIONAL 5
- FAMILY MEMBER/FRIEND 6
- INTERNET 7
- BOOK/LIBRARY 8
- WOULD NOT CALL FOR HELP 9
- OTHER (specify) _____ 91
- REFUSED -7
- DON'T KNOW -8

b. An older person visiting your household says that he may have taken his high blood pressure medication twice by mistake. [Where would you call first?]

- POISON CONTROL CENTER (PCC) 1
- 911/RESCUE SQUAD 2
- FIRE DEPARTMENT/POLICE DEPARTMENT 3
- HOSPITAL/EMERGENCY ROOM/URGENT CARE 4
- DOCTOR/NURSE/PHARMACIST/HEALTH 5
- PROFESSIONAL 5
- FAMILY MEMBER/FRIEND 6
- INTERNET 7
- BOOK/LIBRARY 8
- WOULD NOT CALL FOR HELP 9
- OTHER (specify) _____ 91
- REFUSED -7
- DON'T KNOW -8

- c. A neighbor runs in and says she needs help because her child drank windshield wiper fluid.
[Where would you call first?]

POISON CONTROL CENTER (PCC)	1
911/RESCUE SQUAD	2
FIRE DEPARTMENT/POLICE DEPARTMENT	3
HOSPITAL/EMERGENCY ROOM/URGENT CARE	4
DOCTOR/NURSE/PHARMACIST/HEALTH PROFESSIONAL	5
FAMILY MEMBER/FRIEND	6
INTERNET	7
BOOK/LIBRARY	8
WOULD NOT CALL FOR HELP	9
OTHER (specify) _____	91
REFUSED	-7
DON'T KNOW	-8

- d. You think you have an insect bite and your arm becomes very swollen from wrist to elbow.
[Where would you call first?]

POISON CONTROL CENTER (PCC)	1
911/RESCUE SQUAD	2
FIRE DEPARTMENT/POLICE DEPARTMENT	3
HOSPITAL/EMERGENCY ROOM/URGENT CARE	4
DOCTOR/NURSE/PHARMACIST/HEALTH PROFESSIONAL	5
FAMILY MEMBER/FRIEND	6
INTERNET	7
BOOK/LIBRARY	8
WOULD NOT CALL FOR HELP	9
OTHER (specify) _____	91
REFUSED	-7
DON'T KNOW	-8

- e. Where would you get general information about ways you can prevent unintentional poisoning?

POISON CONTROL CENTER (PCC)	1
911/RESCUE SQUAD	2
FIRE DEPARTMENT/POLICE DEPARTMENT	3
HOSPITAL/EMERGENCY ROOM/URGENT CARE	4
DOCTOR/NURSE/PHARMACIST/HEALTH PROFESSIONAL	5
FAMILY MEMBER/FRIEND	6
INTERNET	7
BOOK/LIBRARY	8
OTHER (specify) _____	91
REFUSED	-7
DON'T KNOW	-8

BOX 3

Random selection of R5a-e and ask R6.

R6. Why is (a/the) (INSERT RESPONSE TO SELECTED R6a-f)? the best option?
[CODE ALL THAT APPLY]

BEST ADVICE.....	1
KNOWS MOST ABOUT CHILD/OLDER PERSON/ME.....	2
RELIABLE INFORMATION/CAN TRUST INFORMATION ...	3
EXPERTS TRAINED TO HELP/SAVE LIVES.....	4
MEDICAL PERSONNEL GIVE ADVICE	5
QUICK RESPONSE IN EMERGENCY.....	6
HAVE BEEN TOLD TO CALL THERE.....	7
MATERIALS SAY TO CALL THERE/STICKER ON PHONE .	8
MOST UP-TO-DATE INFORMATION.....	9
NOT SURE IF EMERGENCY/FIND OUT IF EMERGENCY....	10
NOT URGENT	11
OTHER (Specify).....	91
REFUSED.....	-7
DON'T KNOW.....	-8

BOX 4

If R2=1(has called a poison control center in the past year) or if any R5 a-e= 1 (R would call a poison control center),
ask R7. Else, go to R10.

R7. Now I would like to ask you some questions about poison control centers. In many areas of the country, there is more than one number that can be dialed to reach a poison control center. What telephone number (would you/did you) dial to contact a poison control center? [WAIT FOR A CODEABLE RESPONSE IF R REPLIES DON'T KNOW AT FIRST.]

1-800-222-1222	1	(GO TO R9)
OTHER 800 OR 888 NUMBER (specify).....	2	(GO TO R9)
OTHER 800 or 888 NUMBER (not specified).....	3	(GO TO R8)
OTHER NUMBER, NOT 800 (specify).....	4	(GO TO R9)
OTHER NUMBER, NOT 800 (not specified).....	5	(GO TO R8)
REFUSED.....	-7	(GO TO R8)
DON'T KNOW.....	-8	(GO TO R8)

R8. If you needed to contact a poison control center immediately, where would you look to find their telephone number? [CODE ALL THAT APPLY.]

- a. ON POISON PREVENTION MATERIALS/MAGNET/
STICKERS 1 (GO TO BOX 5)
- b. TELEPHONE BOOK..... 2 (GO TO BOX 5)
- c. 411/DIRECTORY ASSISTANCE..... 3 (GO TO BOX 5)
- d. INTERNET 4 (GO TO BOX 5)
- e. OTHER (Specify)_____ 91 (GO TO BOX 5)
- REFUSED..... -7 (GO TO BOX 5)
- DON'T KNOW..... -8 (GO TO BOX 5)

R9. Why (would you/did you) choose that telephone number? [CODE ALL THAT APPLY.]

- a. MEMORIZED IT/KNOW IT..... 1
- b. COULD LOCATE IT QUICKLY..... 2
- c. ON POISON PREVENTION MATERIALS/MAGNET/
STICKERS 3
- d. LISTED IN TELEPHONE BOOK..... 4
- e. 411/DIRECTORY ASSISTANCE GAVE THE NUMBER . 5
- f. CALLED THE NUMBER BEFORE 6
- g. THE RIGHT/BEST NUMBER
FOR POISON PREVENTION INFORMATION..... 7
- h. THE RIGHT NUMBER/BEST NUMBER FOR
A POISONING EXPOSURE/EMERGENCY 8
- i. THE RIGHT NUMBER/BEST NUMBER FOR
PURPOSE OF CALL 9
- j. A TOLL FREE NUMBER..... 10
- k. A LOCAL NUMBER/CONNECTED TO A
LOCAL PCC 11
- l. OTHER (Specify)_____ 91
- REFUSED..... -7
- DON'T KNOW..... -8

BOX 5

If R7 NE 1 (R would not call 800-222-1222
to reach a poison control center), ask R10. Else, go to R13.

R10. Now I would like to ask you a different kind of question. Have you ever seen, read or heard any messages about this telephone number: 1-800-222-1222?

- YES 1 (GO TO R11)
- NO 2 (GO TO R15)
- REFUSED..... -7 (GO TO R15)
- DON'T KNOW..... -8 (GO TO R15)

R11. Do you know what 1-800-222-1222 connects to?

- YES 1 (GO TO R12)
- NO 2 (GO TO R13)
- REFUSED..... -7 (GO TO R13)
- DON'T KNOW..... -8 (GO TO R13)

R12. What does 1-800-222-1222 connect to? [CODE ALL THAT APPLY.]

- A POISON CONTROL CENTER..... 1
- SOMEONE TO HELP WITH POISONING EXPOSURE 2
- INFORMATION ABOUT POISON/PREVENTION 3
- DOCTOR/NURSE/PHARMACIST 4
- HOSPITAL/EMERGENCY ROOM 5
- OTHER (Specify)_____ 6
- REFUSED..... -7
- DON'T KNOW..... -8

R13. How did you learn about 1-800-222-1222? [CODE ALL THAT APPLY.]

- PUBLIC SERVICE ANNOUNCEMENT/TV/RADIO 1 (GO TO BOX 6)
- BROCHURE/MAGNET/STICKERS..... 2 (GO TO R14)
- POSTER..... 3 (GO TO R14)
- NEWSPAPER AD..... 4 (GO TO BOX 6)
- TELEPHONE BOOK 5 (GO TO BOX 6)
- 411/INFORMATION/DIRECTORY ASSISTANCE 6 (GO TO BOX 6)
- DOCTOR/NURSE/HEALTH PROFESSIONAL..... 7 (GO TO BOX 6)
- WORD OF MOUTH/RELATIVE/FRIEND 8 (GO TO BOX 6)
- DAYCARE/SCHOOL/TEACHER..... 9 (GO TO BOX 6)
- INTERNET 10 (GO TO BOX 6)
- OTHER (Specify) 11 (GO TO BOX 6)
- REFUSED..... -7 (GO TO BOX 6)
- DON'T KNOW..... -8 (GO TO BOX 6)

R14. Where did you (see/get) the material that had information about 1-800-222-1222? [CODE ALL THAT APPLY.]

- POISON CONTROL CENTER..... 1
- DOCTOR/NURSE/HEALTH PRACTITIONER/OFFICE 2
- FIRE DEPARTMENT/POLICE DEPARTMENT 3
- STORE..... 4
- LIBRARY 5
- HOSPITAL/EMERGENCY ROOM 6
- RELATIVE (E.G., HUSBAND, WIFE, MOTHER, SISTER)..... 7
- CHILD’S OTHER PARENT 8
- FRIEND/NEIGHBOR 9
- DAYCARE/ SCHOOL/TEACHER..... 10
- COMMUNITY EVENT 11
- INTERNET 12
- OTHER (specify)_____ 91
- REFUSED..... -7
- DON’T KNOW..... -8

BOX 6

If R2=1 or R5a-e=1 or R12=1, ask R18. If R11 NE 1, go to R15. Else, ask R15.

R15. That is the toll-free poison control center telephone number. Have you ever heard of poison control centers?

- YES 1 (GO TO R16)
- NO 2 (GO TO R22 INTRO)
- REFUSED..... -7 (GO TO R22 INTRO)
- DON’T KNOW..... -8 (GO TO R22 INTRO)

R16. If you needed to contact a poison control center immediately, where would you look to find their telephone number? [CODE ALL THAT APPLY.]

- a. ON POISON PREVENTION MATERIALS/MAGNET/
STICKERS 1 (GO TO R17)
- b. TELEPHONE BOOK..... 2 (GO TO R18)
- c. 411/DIRECTORY ASSISTANCE..... 3 (GO TO R18)
- d. INTERNET 4 (GO TO R18)
- e. OTHER (Specify)_____ 91 (GO TO R18)
- REFUSED..... -7 (GO TO R18)
- DON’T KNOW..... -8 (GO TO R18)

R17. Where did you get these materials? [CODE ALL THAT APPLY.]

POISON CONTROL CENTER.....	1
DOCTOR/NURSE/HEALTH PRACTITIONER.....	2
FIRE DEPARTMENT/POLICE DEPARTMENT.....	3
STORE.....	4
LIBRARY.....	5
HOSPITAL/EMERGENCY ROOM.....	6
RELATIVE (E.G., HUSBAND, WIFE, MOTHER, SISTER).....	7
CHILD'S OTHER PARENT.....	8
FRIEND/NEIGHBOR.....	9
DAYCARE/ SCHOOL/TEACHER.....	10
COMMUNITY EVENT.....	11
INTERNET.....	12
OTHER (specify).....	91
REFUSED.....	-7
DON'T KNOW.....	-8

R18. Now I'd like to ask you some questions about poison control centers. The first question is...

Are poison control centers open...

Monday through Saturday from 9 am to 5 pm, or.....	1
Seven days a week, 24 hours a day, or.....	2
Do you not know?.....	3
REFUSED.....	-7

R19. Next, are calls to the poison control centers answered by...

Trained volunteers,.....	1
Health care professionals like nurses or pharmacists, or.....	2
Do you not know?.....	3
REFUSED.....	-7

R20. When you call the poison control center's 1-800-222-1222 telephone number, are you connected with a...

Local poison control center in the area where you live,.....	1
A single location that serves the nation, or.....	2
Do you not know?.....	3
REFUSED.....	-7

R21. Now we'd like your opinion. Is a poison control center the best place to...

	YES	NO	DON'T KNOW/ NOT SURE	REF
a. Get treatment advice in an emergency if a poisoning had definitely occurred?.....	1	2	3	-7
b. Tell you whether a possible poisoning situation is a serious health risk?.	1	2	3	-7
c. Get general information about how to prevent poisonings?.....	1	2	3	-7

R22INTRO Now, just a few questions about you and your household.

R22. Are you male or female? CONFIRM, IF KNOWN.

MALE	1
FEMALE	2
REFUSED.....	-7
DON'T KNOW	-8

R23. How old are you? Are you... [READ EACH CATEGORY]

18-24	1
25-44	2
45-64	3
age 65 or older	4
REFUSED.....	-7
DON'T KNOW	-8

R24. What is the highest grade or level of school you completed? [CODE ONLY ONE.]

NO SCHOOLING OR GRADES 1-8.....	1	(GO TO R25)
SOME HIGH SCHOOL (GRADES 9-11).....	2	(GO TO R25)
GRADE 12, HIGH SCHOOL DIPLOMA, OR GED	3	(GO TO R25)
VOCATIONAL/TECHNICAL SCHOOL OR SOME COLLEGE BUT NO BACHELOR'S DEGREE	4	(GO TO R26)
BACHELOR'S DEGREE (B.A., B.S.).....	5	(GO TO R26)
MORE THAN A BACHELOR'S DEGREE (POST-GRADUATE COURSES, M.D., PhD, ETC).....		
REFUSED.....	-7	(GO TO R26)
DON'T KNOW	-8	(GO TO R26)

R25. Do you have a high school diploma or its equivalent, a GED?

YES.....	1
NO.....	2
REFUSED.....	-7
DON'T KNOW.....	-8

- R26. Are you of Spanish, Hispanic, or Latino origin?
- YES 1
 NO..... 2
 REFUSED..... -7
 DON'T KNOW..... -8
- R27. How do you describe your race? You may choose more than one. [CODE ALL THAT APPLY.]
- a. White,..... 1
 b. Black or African-American,..... 2
 c. American Indian or Alaska Native,..... 3
 d. Asian, or..... 4
 e. Native Hawaiian or Pacific Islander?..... 5
 REFUSED..... -7
 DON'T KNOW..... -8
- Now I have just a few questions about your household.
- R28. Do you own or rent your home?
- OWN..... 1
 RENT..... 2
 HAVE ANOTHER ARRANGEMENT..... 3
 REFUSED..... -7
 DON'T KNOW..... -8
- R29. Do any people age 60 or older live in this household?
- YES 1
 NO..... 2
 REFUSED..... -7
 DON'T KNOW..... -8
- R30. Do any people under age 18 live in this household?
- YES 1
 NO..... 2 (GO TO R33)
 REFUSED..... -7
 DON'T KNOW..... -8

R31. Do any people age 5 or younger live in this household?

- YES..... 1 (GO TO R32)
- NO..... 2 (GO TO R33)
- REFUSED..... -7 (GO TO R33)
- DON'T KNOW..... -8 (GO TO R33)

R32. Are you a parent or guardian of any of these children age 5 and younger?

- YES..... 1
- NO..... 2
- REFUSED..... -7
- DON'T KNOW..... -8

R33. What was the total income of all persons in your household over the past year, including salaries or other earnings, interest, retirement, and so on for all household members? Was it...

- Less than \$25,000 1
- \$25,000 to \$50,000 2
- \$50,001 to \$75,000, or 3
- Over \$75,000 4
- REFUSED..... -7
- DON'T KNOW..... -8

R34. What is your Zip Code?

ZIP CODE _ _ _ _ _

THANK Those are all the questions I have for you. Thank you very much for your time. I would like to give you a telephone number in case you are interested in receiving more information about poison prevention or the ways that poison control centers can help in a poison emergency. The number you can call is 1-800-222-1222. This number works from any place in the country and connects you to a local poison control center where health care professionals certified to provide poison prevention information and treatment advice for poisonings are available 24 hours of every day.